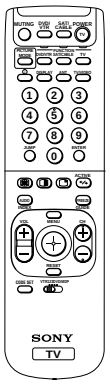
Self Diagnosis Supported model

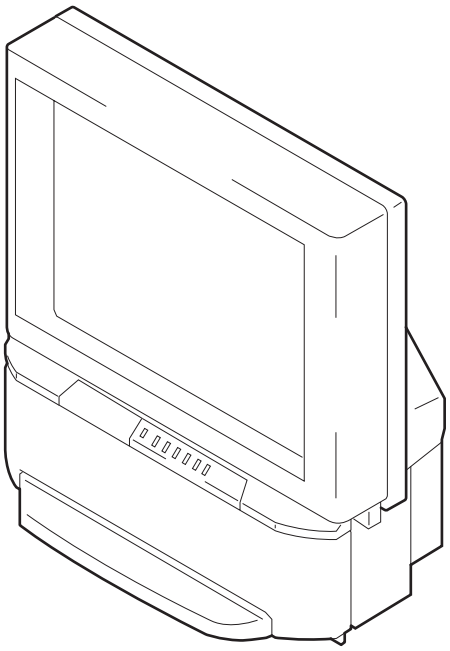
SERVICE MANUAL RA-3 CHASSIS

MODEL	COMMANDER	DEST.	CHASSIS NO.
KP-48V80	RM-Y905	US	SCC-P14CA
KP-48V80	RM-Y905	Canadian	SCC-P14CA
KP-53V80	RM-Y905	US	SCC-P14AA
KP-53V80	RM-Y905	Canadian	SCC-P14AA

MODEL	COMMANDER	DEST.	CHASSIS NO.
KP-61V80	RM-Y905	US	SCC-P14BA
KP-61V80	RM-Y905	Canadian	SCC-P14BA



RM-Y905



KP-48V80/53V80/61V80

MICROFILM

* Please file according to model size. ..... ☐

48 53 61

COLOR REAR VIDEO PROJECTOR

SONY®

SPECIFICATIONS

Projection system
3 picture tubes, 3 lenses, horizontal in-line system
Picture tube
7-inch high-brightness monochrome tubes (6.3 raster size), with optical coupling and liquid cooling system
Projection lenses
High performance, large diameter hybrid lens F1.05
Television system
American TV standard
Channel coverage
VHF: 2–13/UHF: 14 –69/CATV: 1 – 125
Antenna
75 ohm external terminal for VHF/UHF
Screen size (measured diagonally)
48 inches (KP-48V80)
53 inches (KP-53V80)
61 inches (KP-61V80)
Inputs/outputs
VIDEO 1/3 IN
VIDEO 2 INPUT
S VIDEO IN (4-pin mini DIN):
Y: 1 Vp-p, 75-ohms unbalanced, sync negative
C: 0.286 Vp-p (Burst signal), 75 ohms
VIDEO (phono jack): 1 Vp-p, 75-ohms unbalanced, sync negative
AUDIO (phono jacks): 500 mVrms (100% modulation), Impedance: 47 kilohms
VIDEO 4/5 IN
Y: 1 Vp-p, 75 ohms, sync negative
PB: 0.7 Vp-p, 75 ohms
PR: 0.7 Vp-p, 75 ohms
AUDIO (phono jacks): 500 mVrms (100% modulation), Impedance: 47 kilohms
TV OUT/MONITOR OUT
VIDEO (phono jack): 1 Vp-p, 75-ohms unbalanced, sync negative
AUDIO (phono jacks): 500 mVrms (100% modulation), Impedance: 470 ohms
UDIO (VAR/FIX) OUT (phono jacks): 500 mVrms (100% modulation), Impedance: 470 ohms
S-LINK: minijacks
CONTROL S OUT: minijack

Speaker
Tweeter: 66 mm (2 5/8”) x 2
Woofer: 130 mm (5 1/8”) x 2 (KP-48V80/53V80)
160 mm (6 3/8”) x 2 (KP-61V80)
Speaker output
20 W x 2
Power requirement
120 V AC, 60 Hz
Power consumption
In use (Max.): 170 W
In standby: 1 W
Dimensions (W/H/D)
1,105 x 1,338 x 579 mm (43 1/2 x 52 5/8 x 22 3/4 inches) (KP-48V80)
1,216 x 1,417 x 632 mm (47 7/8 x 55 3/4 x 24 7/8 inches) (KP-53V80)
1,370 x 1,560 x 670 mm (54 x 61 3/8 x 26 3/8 inches) (KP-61V80)
Mass
68.8 kg (151 lbs 11 oz) (KP-48V80)
76.0 kg (167 lbs 9 oz) (KP-53V80)
93.6 kg (206 lbs 6 oz) (KP-61V80)
Supplied accessories
Remote control RM-Y905 (1)
Batteries (2) size AA (R6)
Optional accessories
Connecting cables
RK-G34, RK-74A, RK-G69HG, VMC-10HG, VMC-720M, VMC-810S/820S, YC-15V/30V
U/V mixer EAC-66

Design and specifications are subject to change without notice.

SAFETY CHECK-OUT

(US model only)

After correcting the original service problem, perfom the following safety checks before releasing the set to the customer:

1. Check the area of your repair for unsoldered or poorly-soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the interboard wiring to ensure that no wires are "pinched" or contact high-wattage resistors.
3. Check that all control knobs, shields, covers, ground straps, and mounting hardware have been replaced. Be absolutely certain that you have replaced all the insulators.
4. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
5. Look for parts which, through functioning, show obvious signs of deterioration. Point them out to the customer and recom mend their replacement.
6. Check the line cords for cracks and abrasion. Recommend the replacement of any such line cord to the customer.
7. Check the condition of the monopole antenna (if any). Make sure the end is not broken off, and has the plastic cap on it. Point out the danger of impalement on a broken antenna to the customer, and recommend the antenna's replacement.
8. Check the B+ and HV to see they are at the values specified. Make sure your instruments are accurate;be suspicious of your HV meter if sets always have low HV.
9. Check the antenna temminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5mA (500 microampers) . Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to usc these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. NearIy all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

HOW TO FIND A GOOD EARTH GROUND

A cold-water pipe is guaranteed earth ground;the cover-plate retaining screw on most AC outlet boxes is also at earth ground. If the retaining screw is to be used as your earth-ground, verify that it is at ground by measuring the resistance between it and a cold-water pipe with an ohmmeter. The reading should be zero ohms. If a cold-water pipe is not accessible, connect a 60-l00 watts trouble light (not a neon lamp) between the hot side of the receptacle and the retaining screw. Try both slots, if necessary, to locate the hot side of the line, the lamp should light at normal brilliance if the screw is at ground potential. (See Fig. B)

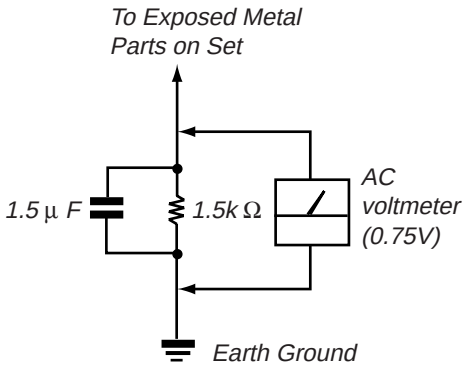


Fig. A. Using an AC voltmeter to check AC leakage.

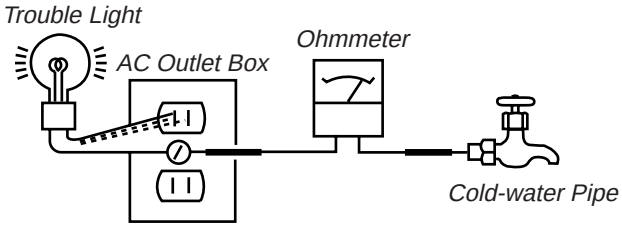


Fig. B. Checking for earth ground.

SELF DIAGNOSIS FUNCTION

1. Summary of Self-Diagnosis Function

- This device includes a self-diagnosis function.
- In case of abnormalities, the TIMER/STANDBY indicator automatically blinks. It is possible to predict the abnormality location by the number of blinks. The Instruction Manual describes blinking of the TIMER/STANDBY indicator.
- If the symptom is not reproduced sometimes in case of a malfunction, there is recording of whether a malfunction was generated or not. Operate the remote command to confirm the matter on the screen and to predict the location of the abnormality.

2. Diagnosis Items and Prediction of Malfunction Location

- When a malfunction occurs the TIMER/STANDBY indicator only blinks for one of the following diagnosis items. In case of two or more malfunctions, the item which first occurred blinks. If the malfunctions occurred simultaneously, the item with the lower blink count blinks first.
- The screen display displays the results regarding all the diagnosis items listed below. The display " 0 " means that no malfunctions occurred.

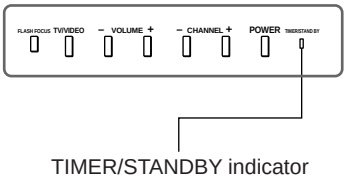
Diagnosis item	TIMER/STANDBY Indicater Number of blinks	Supposed malfunction	Condition	Self-diagnosis screen display, Diagnosis item: Results
• Power not ON	0	[Standby Power Supply System] F601 open. R607 open. Q601 short circuit [Main Power Supply System] IC601 and R612 are broken. VDR601 short-circuit	Cannot turn on the power. LED doesn't blink.	
+B OCP detection	2 times	Short circuit of power supply system in each circuit.	Goes to the standby mode Short circuit of +B line	2 : +B OCP 000
+B OVP detection	3 times	T603 pin 78 open. R672 open.	Goes to the standby mode Malfunction of power supply circuit	3 : +B OVP 000
Vertical deflection stop	4 times	IC1509(V out) is broken. Q1505(V Pulse Buffer) is broken.	Raster goes to one line horizontally, Aand then video signal is muted.	4 : V Stop 000
Video out abnormality detection	5 times	Video out, Q705, 732, 761 and others in C board circuit. Q218, 219, 220 (A board)	TIMER/STANDBY LED blinks approx. 30 seconds, and then blinks for the self diagnosis.	5 : AKB 000
Horizontal deflection stop	6 times	C515, 516 open. IC206(YC Jungle) is broken.	Raster doesn't appear.	6 : H Stop 000
Audio abnormality detection	8 times	IC406(Audio amp.) is broken. PS401, 402 open.	The sound is not out. Goes to the standby mode	8 : Audio 000

* : 000 the range of values for number of operations is 000-255. For 256 or higher there is no count up and the number remains at 255.

3. Blinking count display of TIMER/STAVDBY indicator

* One blink is not used for self-diagnosis.

< FRONT PANEL >

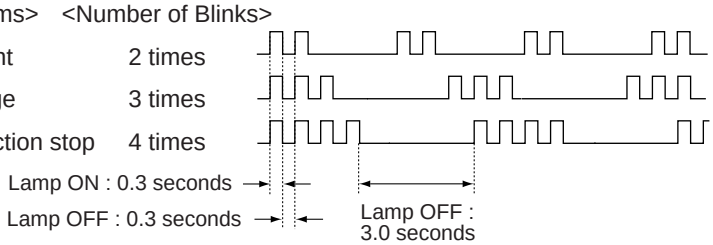


TIMER/STANDBY indicator

•EXAMPLE

<Diagnosis Items> <Number of Blinks>

- +B overcurrent 2 times
- +B overvoltage 3 times
- Vertical deflection stop 4 times



Release of TIMER/STANDBY indicator blinking.

- The TIMER/STANDBY indicator blinking display is released by turning OFF the power switch on the TV main unit or removing the plug from the power.

4. Self-diagnosis screen displays

- In cases of malfunctions where it is not possible to determine the symptom such as when the power goes off occasionally or when the screen disappears occasionally, there is a screen display on whether the malfunction occurred or not in the past (and whether the detection circuit operated or not) in order to allow confirmation.

<Screen Display Method>

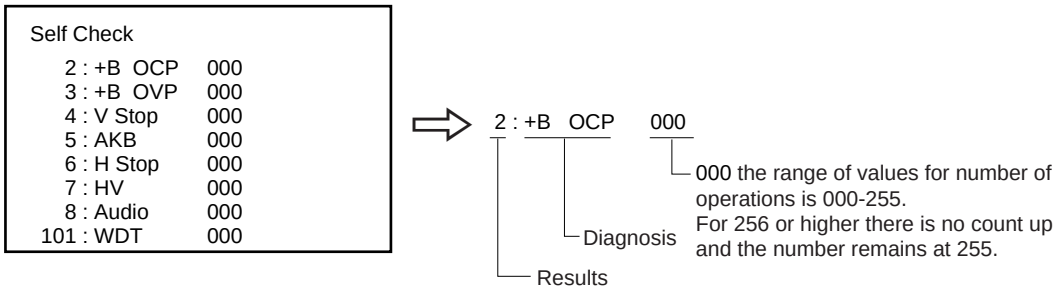
- Quickly press the remote command button in the following order from the standby state.

DISPLAY ➡ Channel 5 ➡ VOL – ➡ POWER

⇧

Be aware that this differs from the method of entering the service mode (volume +).

Self-diagnosis screen display


Self Check
2 : +B OCP 000
3 : +B OVP 000
4 : V Stop 000
5 : AKB 000
6 : H Stop 000
7 : HV 000
8 : Audio 000
101 : WDT 000
2 : +B OCP 000
000 the range of values for number of operations is 000-255.
For 256 or higher there is no count up and the number remains at 255.
Diagnosis
Results

5. Self-Diagnosis Screen Display

- The results display is not automatically cleared. In case of repairs and after repairs, check the self-diagnosis screen and be sure to return the results display to " 0 ".
- If the results display is not returned to " 0 " it will not be possible to judge a new malfunction after completing repairs.

<Method of Clearing Results Display>

1. Power off (Set to the standby mode)
2. DISPLAY ➡ Channel 5 ➡ VOL + ➡ POWER (Service Mode)
3. Channel 8 ➡ ENTER (Test reset = Factory preset condition)

<Method of Ending Self Diagnosis Screen>

- When ending the self-diagnosis screen completely, turn the power switch OFF on the remote commander or the main unit.

6. Self-diagnosis function operation

OCP Low B and +B line detect DET SHORT, and shut-down POWER ON RELAY.
Reset by turning power on/off.
In case of +B is loaded approx. 2A or more, microcomputer detects it via IC651.

OVP In case of +B becomes approx. 150V or more, POWER ON RELAY shuts down and microcomputer detects it via IC651.
Reset by turning power on/off just the same as OCP.

V Stop In case of microcomputer detects 2 seconds or more interval of V Pulse, Reference Pulse turns off by turning off the picture signal in YC Jungle IC (IC206).
After the picture signal turns off, H Pulse is regenerated 2 seconds or more, the picture signal turns on.

AKB IK detection. Makes LED blinking in case of microcomputer doesn't detect IK returns of IC206 CXA2147Q 30 seconds or more.

H Stop In case of HV becomes 33kV or more, IC502 detects it and shut-down H Drive Pulse.
Microcomputer receives H Stop data from IC206 and makes LED blinking.

Audio In case of DC component overlaps the output of Audio Amp., microcomputer detects it and makes LED blinking.
Microcomputer forces to shut down the power.

Self-diagnosis block diagram

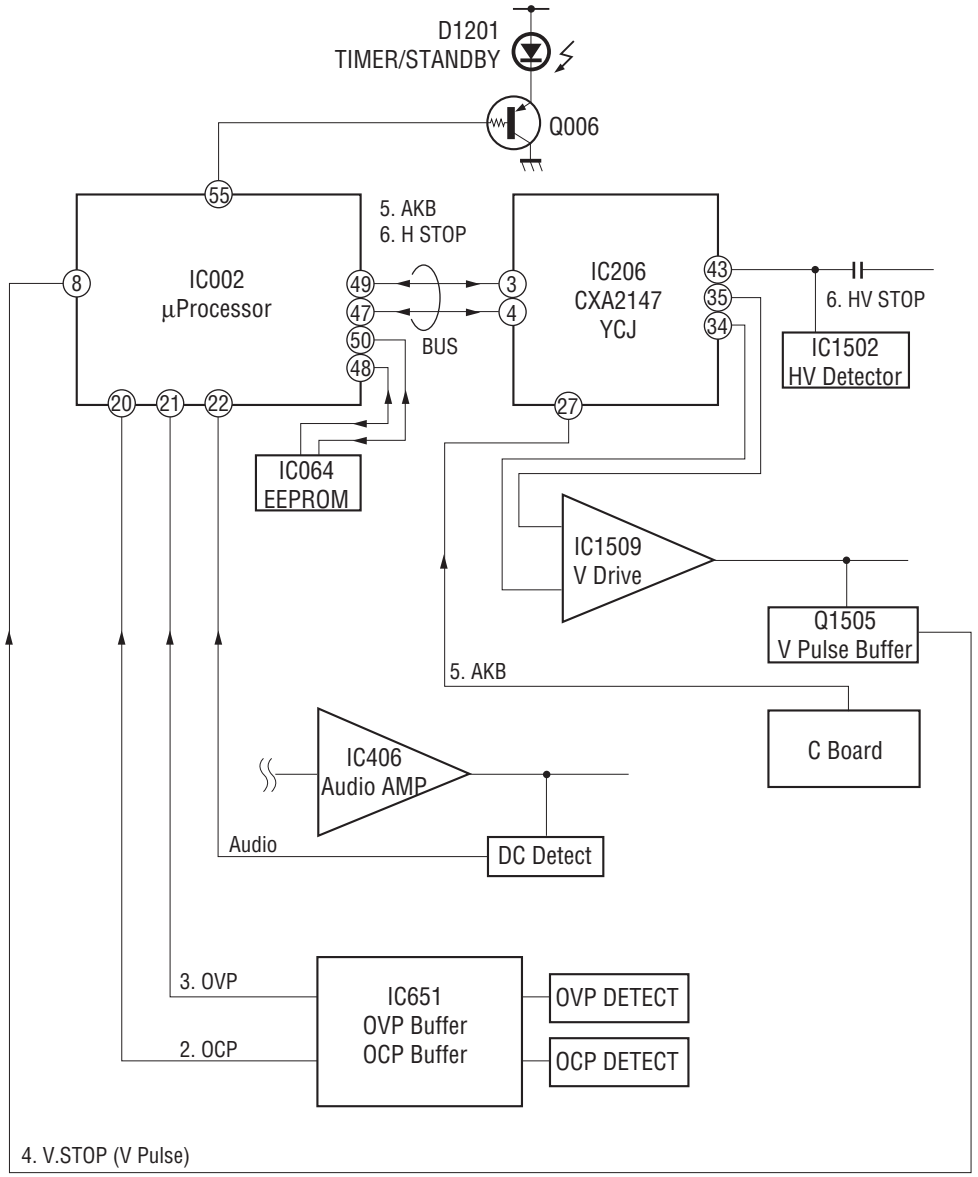


TABLE OF CONTENTS

Section Title Page

SELF DIAGNOSIS FUNCTION 4

1. GENERAL

Using This Manual 9
Precautions 9
Installing and Connecting the Projection TV 9
Basic Set Up 17
Using Your New Projection TV 18
Adjusting Your SET UP (menus) 22
Operating Video Equipment 33
Operating a Cable Box or Satellite Receiver (SAT) 34
Troubleshooting 35

2. DISASSEMBLY

2-1. Rear Board Removal 36
2-2. Chassis Assy Removal 36
2-3. Service Position 36
2-4. HA Board and HB Board Removal 36
2-5. Mirror Cover Removal 37
2-6. Beznet Assy Removal 37
2-7. HC Board and S Board Removal 37
2-8. U Board and Terminal Board Removal 37
2-9. A Board and G Board Removal 38
2-10. Picture Tube Removal 38
2-11. High-Voltage Cable Installation and Removal 38

3. SET-UP ADJUSTMENTS

3-1. Screen Voltage Adjustment (Rough Alignment) 39
3-2. Focus Lens Adjustment 39
3-3. Screen (G2) Adjustment 39
3-4. Focus VR Adjustment 39
3-5. Deflection York Tilt Adjustment 40
3-6. “2-Pole Magnet Adjustment (Green, Red)” 40
3-7. 4-Pole Magnet Adjustment 40
3-8. Defocus Adjustment (Blue) 40
3-9. Electrical Adjustment by Remote Commander 41
3-10. Registration Adjustment 46
3-11. Auto Registration Error Code List 49

4. SAFETY RELATED ADJUSTMENTS

4-1. HV Regulation Circuit Check and Adjustment 51
4-2. HV Hold Down Circuit Operation and Adjustment .. 51
4-3. +B Max Voltage Confirmation 51
4-4. +B OVP Confirmation 52

5. CIRCUIT ADJUSTMENTS

5-1. TV Input Sub Contrast Adjustment (VPNT-SCON) 53
5-2. “Video Input Sub-HUE and Sub-Color Adjustment ..... (VPNT-SHUE, SCOL)” 53
5-3. “Component Input Sub-HUE and Sub-Color ..... Adjustment (DAC-UVSH, UVSC)” 53
5-4. P & P Sub Contrast Adjustment (SC-SYDR) 53
5-5. “Sub-HUE, Sub-Color and Main Contrast Adjustment” “(MC-MYDR, MSHU, MSCL, SC-SSHU, SSCL)” . 54
5-6. Bar Display Position Adjustment (OP-DISP) 54
5-7. “PIP Acquisition Area Adjustment (PP-MAHP, SAHP)” 54
5-8. Display Position for Channel Index Mode (CCDCCHP) 54

7. EXPLODED VIEWS

6-1. Block Diagram (1) 55
Block Diagram (2) 57
Block Diagram (3) 59
Block Diagram (4) 63
Block Diagram (5) 67
Block Diagram (6) 69
6-2. Frame Schematic Diagram 71
6-3. Circuit Boards Location 74
6-4. Printed Wiring Boards and Schematic Diagrams 74
• A (1/3)Board 75
• A (2/3)Board 79
• A (3/3)Board 83
• G Board 91
• U Board 101
• CG Board 105
• CR Board 106
• CB Board 107
• HA Board 109
• HC Board 109
• HB Board 110
6-5. Semiconductors 111

7. EXPLODED VIEWS

7-1. Cover (KP-48V80) 113
7-2. Cover (KP-53V80/61V80) 114
7-3. Chassis 115
7-4. Picture Tube 116

8. ELECTRICAL PARTS LIST 117

(CAUTION)

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVING THE ANODE.

WARNING!!

AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD, BECAUSE OF LIVE CHASSIS.
THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESECOMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL TO SAFEOPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.

(ATTENTION)

APRES AVOIR DECONNECTE LE CAP DE L'ANODE, COURTCIRCUITER L'ANODE DU TUBE CATHODIQUE ET CELUI DE L'ANODE DU CAP AU CHASSIS METALLIQUE DE L'APPAREIL, OU AU COUCHE DE CARBONE PEINTE SUR LE TUBE CATHODIQUE OU AU BLINDAGE DU TUBE CATHODIQUE.

ATTENTION!!

AFIN D'EVITER TOUT RISQUE DELECTROCUTION PROVENANT D'UN CHÁSSIS SOUS TENSION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISÉ LORS DE TOUT DEPANNAGE.
LE CHÁSSIS DE CE RECEPTEUR EST DIRECTEMENT RACCORDÉ Á L'ALIMENTATION SECTEUR.

ATTENTION AUX COMPOSANTS RELATIFS ÁLA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIÉS PAR UNE TRAME ET PAR UNE MAPQUE ⚠ SUR LES SCHÉMAS DE PRINCIPE, LES VUES EXPLOSÉES ET LES LISTES DE PIECES CONT D'UNEIMPORTANCE CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT. NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMÉRO DE PIÉCE EST INDIQUÉ DANS LE PRÉSENT MANUEL OU DANS DES SUPPLÉMENTS PUBLIÉS PAR SONY. LES RÉGLAGES DE CIRCUIT DONT L'IMPORTANCE EST CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT SONT IDENTIFIES DANS LE PRÉSENT MANUEL. SUIVRE CES PROCÉDURES LORS DE CHAQUE REMPLACEMENT DE COMPOSANTS CRITIQUES, OU LORSQU'UN MAUVAIS FONCTIONNEMENT EST SUSPECTÉ.

SECTION 1
GENERAL

The operating instructions mentioned here are partial abstracts from the Operating Instructions Manual. The page numbers of the Operating Instruction Manual remain as in the manual. (Part no : 3-806-564-11)

Using This Manual

We recommend that you carefully review the contents of the following four sections in the order provided to ensure that you fully understand the operation of your new projection TV.

1 Installing and Connecting the Projection TV
This section guides you through your initial set up. It shows you how to install your projection TV, to connect your new components and to connect to the antenna and cable.

2 Basic Set Up
This section teaches you the basic skills needed to operate your new projection TV, including Auto Set Up. It shows you how to operate the remote control's special functions.

3 Using Your New Projection TV
This section shows you how to begin using your new projection TV. It shows you how to use your remote control's features.

4 Adjusting Your Set Up (menus)
This section teaches you how to access on-screen menus and adjust your projection TV's settings.

Instructions in this manual are written for the remote control. Similar controls may be found on the projection TV console.

Precautions

Safety

- Operate the projection TV only on 120 V AC.
- The plug is designed, for safety purposes, to fit into the wall outlet only one way. If you are unable to insert the plug fully into the outlet, contact your dealer.
- If any liquid or solid object should fall inside the cabinet, unplug the projection TV immediately and have it checked by qualified service personnel before operating it further.
- If you will not be using the projection TV for several days, disconnect the power by pulling the plug itself. Never pull on the cord.

For details concerning safety precautions, see the supplied leaflet "IMPORTANT SAFEGUARDS."

Note on cleaning

Clean the cabinet of the projection TV with a dry soft cloth. To remove dust from the screen, wipe it gently with a soft cloth. Stubborn stains may be removed with a cloth slightly dampened with solution of mild soap and warm water. Never use strong solvents such as thinner or benzine for cleaning.

If the picture becomes dark after using the projection TV for a long period of time, it may be necessary to clean the inside of the projection TV. Consult qualified service personnel.

Installing

- To prevent internal heat buildup, do not block the ventilation openings.
- Do not install the projection TV in a hot or humid place, or in a place subject to excessive dust or mechanical vibration.
- Avoid operating the projection TV at temperatures below 5° C (41° F).
- If the projection TV is transported directly from a cold to a warm location, or if the room temperature changes suddenly, the picture may be blurred or show poor color. In this case, please wait a few hours to let the moisture evaporate before turning on the projection TV.
- To obtain the best picture, do not expose the screen to direct illumination or direct sunlight. It is recommended to use spot lighting directed down from the ceiling or to cover the windows that face the screen with opaque drapery. It is desirable to install the projection TV in a room where the floor and walls are not of a reflective material.

Installing and Connecting the Projection TV

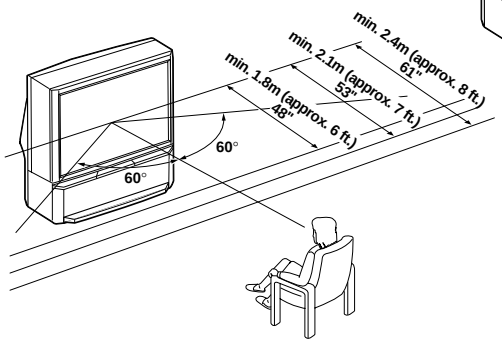
Carrying Your Projection TV

Carrying the projection TV requires three or more people.

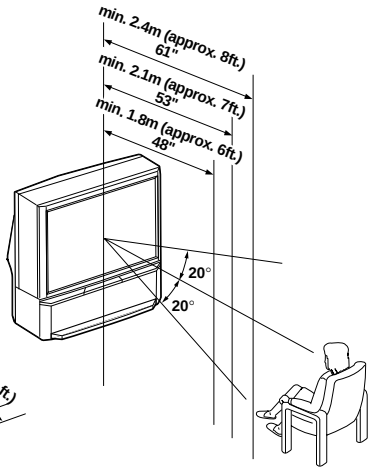
The projection TV has been equipped with casters for easy movement on a hard surface. Please move your projection TV using the casters.

Installing the Projection TV

Recommended viewing area (Horizontal)



Recommended viewing area (Vertical)



Installing and Connecting the Projection TV (continued)

Connector Types

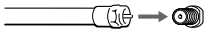
You may find it necessary to use some of the following connector types during set up.

Coaxial cable

Standard TV cable and antenna cable

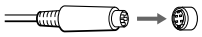
Plug Type

Screw-on Type



S Video cable

High quality video cable for enhanced picture quality



Audio/Video cable

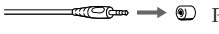
Video - Yellow
Audio (Left) - White
Audio (Right) - Red

Some DVD Players and DTV Receivers are equipped with the following three video connectors.

Y - Green
P_B (C_B, C_b or B–Y) - Blue
P_R (C_R, C_r or R–Y) - Red

S-Link/CONTROL S cable

Sony cable for S-Link and CONTROL S connections. These features are exclusive to Sony products and allow greater control of all Sony equipment.

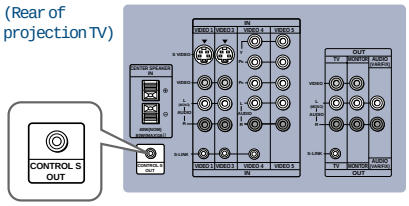


Note:

- For S-Link and CONTROL S connections, you can use the combined S-Link/CONTROL S cable provided with some Sony video equipment, or you can purchase a separate S-Link/CONTROL S cable (RK-G69HG).

About the CONTROL S OUT jack

To control other Sony equipment with the projection TV's remote control, connect the CONTROL S IN jack of the equipment to the CONTROL S OUT jack on the projection TV with the CONTROL S cable.

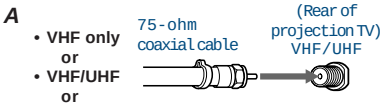


Making Connections

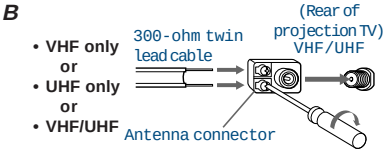
Connecting directly to a cable or an antenna

The connection you choose will depend on the cable found in your home. Newer homes will be equipped with standard coaxial cable (see **A**); older homes will probably have 300-ohm twin lead cable (see **B**); still other homes may contain both (see **C**).
Use 75-ohm coaxial cable for improved picture quality (see **A**).

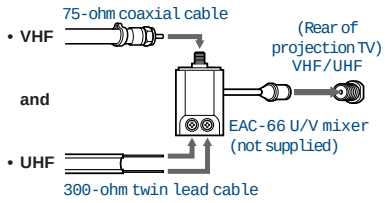
A



B

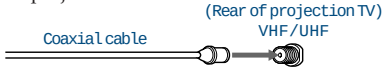


C



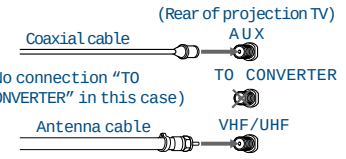
Cable or antenna

This is the simplest connection. Connection is made directly from the cable or antenna to the projection TV.



Cable and antenna

You may find it convenient to use the following set up if your cable provider does not feature local channels that you are able to receive using an antenna.

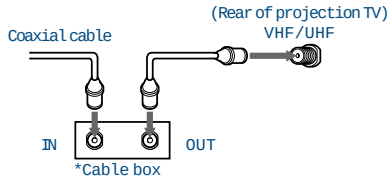


Select Cable or ANT mode by pressing ANT on the remote control.

Connecting a cable box

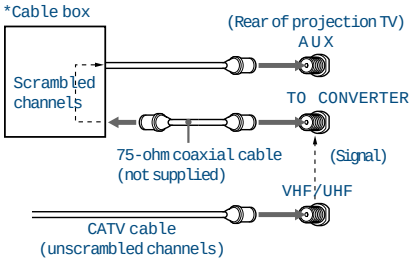
Some pay cable TV systems use scrambled or encoded signals that require a cable box* to view all channels.

Also, set "Cable" to "On" in the Channel Set Up menu (page 35).



Cable box and cable

Some pay cable TV systems use scrambled or encoded signals requiring a cable box* only for certain channels (e.g. HBO, SHOWTIME, etc.)



For this set up, you can switch between scrambled channels (through your cable box), and normal (CATV) channels by pressing ANT on your remote control.

Notes:

- You may be able to program your Sony remote control to operate your cable box. (see "Operating a Cable Box or Satellite Receiver (SAT)" on page 53)
- During PIP, P&P, CHANNEL INDEX or Favorite Channel viewing, the AUX input can only be viewed in the main picture.

Note:

- To view scrambled channels through the cable box, select the video input which the cable box is connected to by pressing TV/VIDEO.

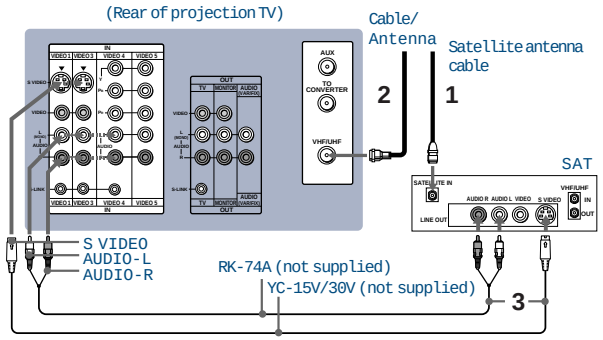
* If your VCR is not equipped with S VIDEO, use a VIDEO cable (yellow) instead of the S VIDEO cable.

** If you are connecting a monaural VCR, connect only the single audio output to the left (MONO) input on the projection TV.

Connecting a satellite receiver (SAT)

Disconnect all power sources before making any connections.

1. Connect the cable from the satellite antenna to the satellite receiver.
2. Attach the coaxial cable from the incoming cable connection or antenna to VHF/UHF on the projection TV.
3. Using AUDIO and S VIDEO cables, connect AUDIO and S VIDEO OUT on the satellite receiver to AUDIO and S VIDEO IN on the projection TV (White-AUDIO Left, Red-AUDIO Right).



Note:

- To view input from the satellite receiver, select the video input which the satellite receiver is connected to by pressing TV/VIDEO on the remote control.

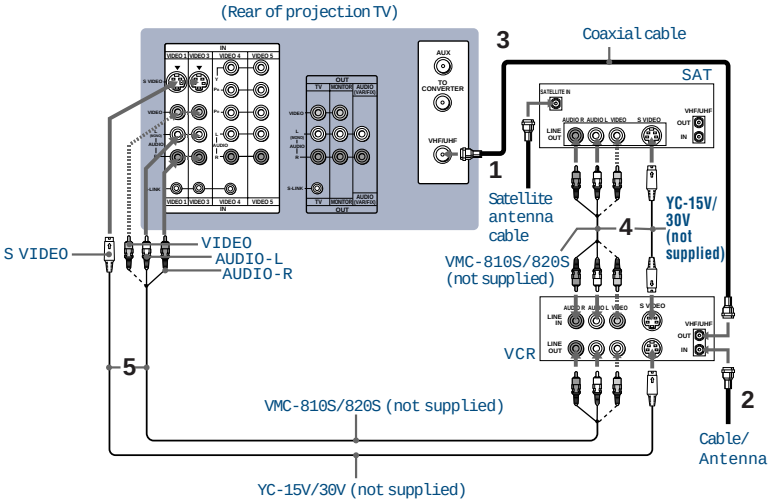
Installing and Connecting the Projection TV (continued)

Connecting a satellite receiver (SAT) and a VCR

Disconnect all power sources before making any connections.

1. Connect the cable from the satellite antenna to the satellite receiver.
2. Attach the coaxial cable from the incoming cable connection or antenna to VHF/UHF IN on the VCR.
3. Using a coaxial cable, connect VHF/UHF OUT on the VCR to VHF/UHF on the projection TV.
4. Using AUDIO and S VIDEO* cables, connect AUDIO and S VIDEO OUT on the satellite receiver to AUDIO and S VIDEO IN on the VCR.
5. Using AUDIO and S VIDEO* cables, connect AUDIO and S VIDEO OUT on the VCR to AUDIO and S VIDEO IN on the projection TV (White-AUDIO Left, Red-AUDIO Right).

*If your VCR is not equipped with S VIDEO, use a VIDEO cable (yellow) instead of the S VIDEO cable.



Note:

- To view input from the satellite receiver or VCR, select the video input which your satellite receiver or VCR is connected to by pressing TV/VIDEO on the remote control.

Installing and Connecting the Projection TV (continued)

Disconnect all power sources before making any connections.

Connecting a satellite receiver (SAT) and a VCR

1 Connect the cable from the satellite antenna to the satellite receiver.

2 Attach the coaxial cable from the incoming cable connection or antenna to VHF/UHF IN on the VCR.

3 Using a coaxial cable, connect VHF/UHF OUT on the VCR to VHF/UHF on the projection TV.

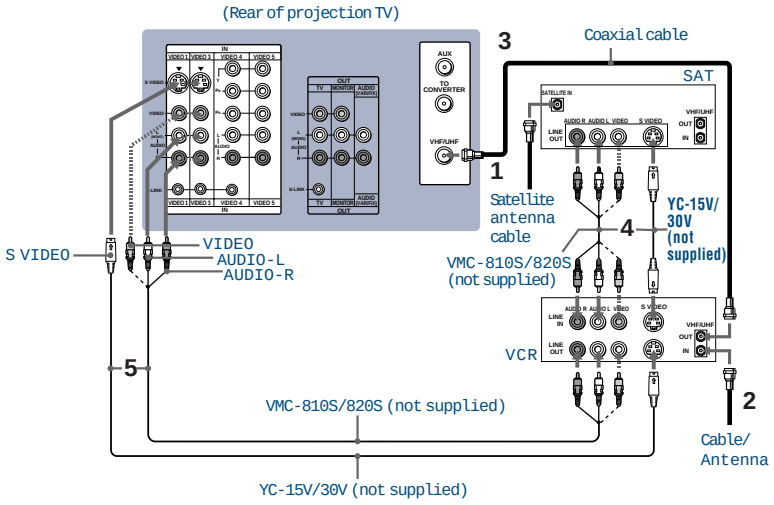
4 Using AUDIO and S VIDEO* cables, connect AUDIO and S VIDEO OUT on the satellite receiver to AUDIO and S VIDEO IN on the VCR.

5 Using AUDIO and S VIDEO* cables, connect AUDIO and S VIDEO OUT on the VCR to AUDIO and S VIDEO IN on the projection TV (White-AUDIO Left, Red-AUDIO Right).

*If your VCR is not equipped with S VIDEO, use a VIDEO cable (yellow) instead of the S VIDEO cable.

Note:

- To view input from the satellite receiver or VCR, select the video input which your satellite receiver or VCR is connected to by pressing TV/VIDEO on the remote control.



Disconnect all power sources before making any connections.

Connecting a DTV (digital television) receiver

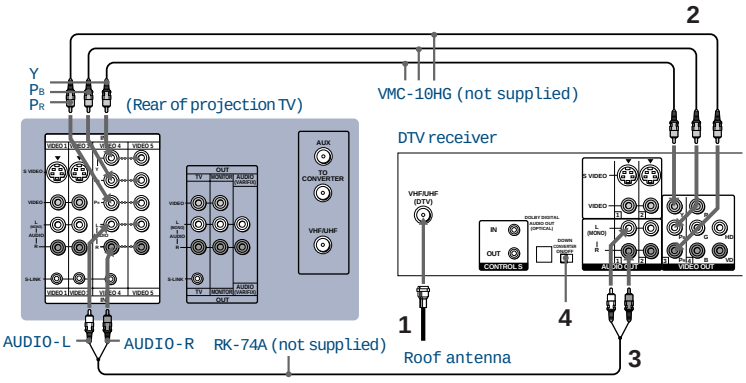
Before connecting, be sure to read the Operating Instructions of the DTV receiver.

1 Attach the coaxial cable from the roof antenna to VHF/UHF on the DTV receiver.

2 Using three yellow VIDEO cables, connect Y, P_B and P_R of VIDEO OUT on the DTV receiver to Y, P_B and P_R of VIDEO 4 or 5 IN on the projection TV.

3 Using an AUDIO cable, connect AUDIO OUT on the DTV receiver to AUDIO of VIDEO 4 or 5 IN on the projection TV (White-AUDIO Left, Red-AUDIO Right).

4 Set the DOWN CONVERTER ON/OFF switch on the DTV receiver to ON.



Installing and Connecting the Projection TV (continued)

Connecting a camcorder

Disconnect all power sources before making any connections.

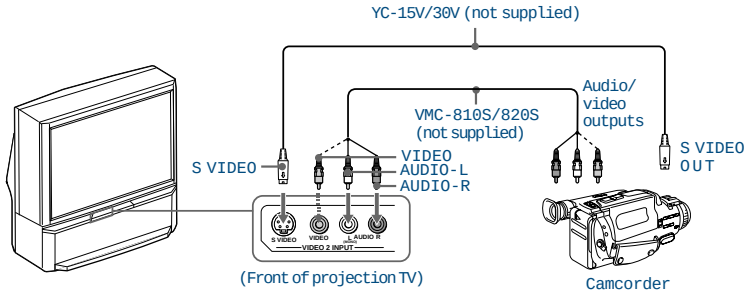
Use this connection to view a picture directly from your camcorder.

1 Using AUDIO and S VIDEO* cables, connect AUDIO and S VIDEO OUT on the camcorder to AUDIO and S VIDEO IN inside the drop-down panel on the front of the projection TV (White-AUDIO Left, Red-AUDIO Right**).

2 Press VIDEO 2 to select the video inputs from a camcorder.

* If your camcorder is not equipped with S VIDEO, use a VIDEO cable (yellow) instead of the S VIDEO cable.

** If you are connecting a monaural camcorder, connect only the single audio output to the left (MONO) input on the projection TV.



Connecting two VCRs for tape editing

Disconnect all power sources before making any connections.

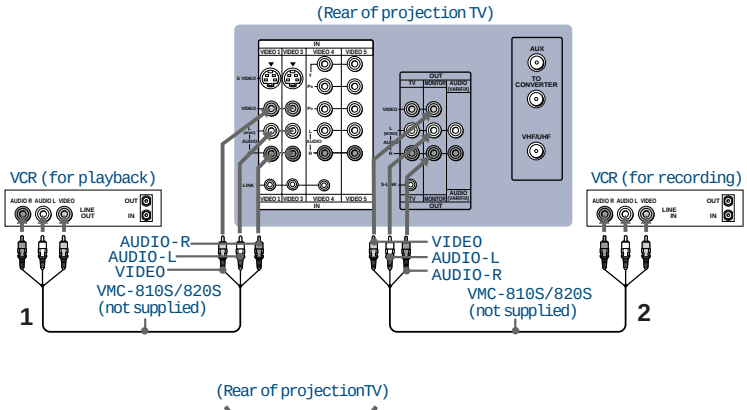
By connecting a second VCR to MONITOR OUT, you can record a program being played by the primary VCR to the second VCR or perform tape editing and dubbing.

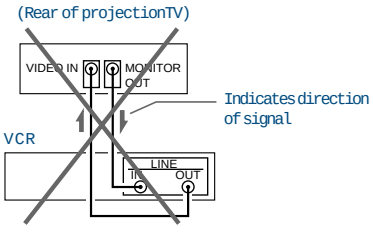
1 Connect the VCR intended for playback using the connection instructions on page 6 of this manual.

2 Using an AUDIO/VIDEO cable, connect AUDIO and VIDEO IN on the VCR intended for recording to AUDIO and VIDEO OUT of MONITOR OUT on the projection TV.

Notes:

- Do not change the input signal while editing through MONITOR OUT.
- When connecting a single VCR to the projection TV: if VCR LINE OUT is connected to VIDEO IN on the projection TV, ***do not*** connect MONITOR OUT on the projection TV to the VCR LINE INPUT (see right). Doing so will cause program interference and other viewing problems.





Installing and Connecting the Projection TV (continued)

Connecting a DVD Player (Upper illustration)

Using an AUDIO and S VIDEO cables, connect AUDIO and S VIDEO IN on the projection TV to AUDIO and S VIDEO OUT on the DVD Player (White-AUDIO Left, Red-AUDIO Right).

Connecting a DVD Player with component video output connectors (Lower illustration)

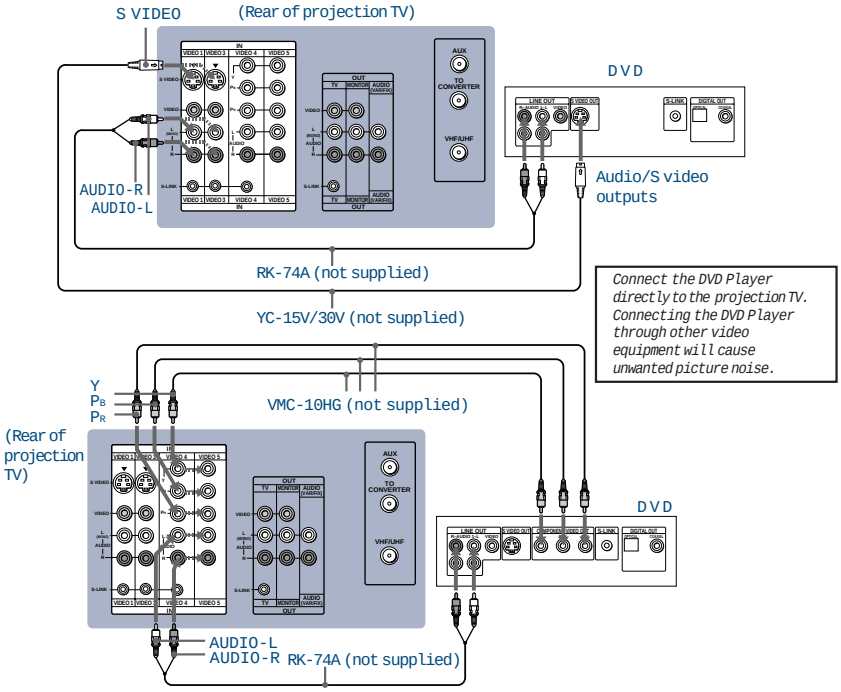
1 Using an AUDIO cable, connect AUDIO of LINE OUT on the DVD Player to AUDIO of VIDEO 4 or 5 IN on the projection TV (White-AUDIO Left, Red-AUDIO Right).

2 Using three yellow VIDEO cables, connect Y, P_B, and P_R of COMPONENT VIDEO OUT on the DVD Player to Y, P_B, and P_R of VIDEO 4 or 5 IN on the projection TV.

Notes:

- Since the high quality pictures on a DVD disc contain a lot of information, picture noise may appear. In this case, adjust "Noise Reduction" in the Video menu. (see "Noise Reduction" on page 30)
- Some DVD Player terminals may be labeled differently. If so, connect as follows:
  Connect Y (green) to Y.
  Connect P_B (blue) to C_B, Cb or B-Y.
  Connect P_R (red) to C_R, Cr or R-Y.

Disconnect all power sources before making any connections.



Connecting an AV receiver

For greater control of all audio and video equipment, connect an AV receiver.

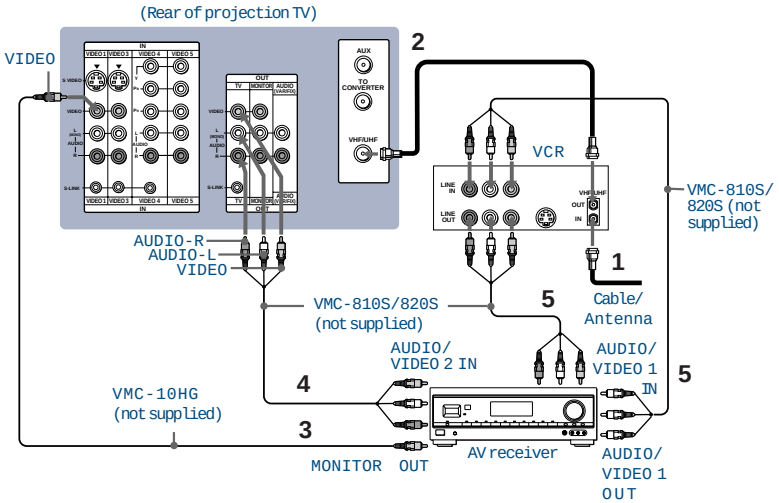
1-2 Perform as described in "Connecting a cable TV system/antenna to a VCR" on page 6.

3 Using a VIDEO cable, connect VIDEO 1 IN on the projection TV to MONITOR OUT on the AV receiver.

4 Using an AUDIO/VIDEO cable, connect TV OUT on the projection TV to VIDEO 2 IN on the AV receiver.

5 Using an AUDIO/VIDEO cable, connect the video equipment to the AV receiver.

Disconnect all power sources before making any connections.



Installing and Connecting the Projection TV (continued)

Disconnect all power sources before making any connections.

Connecting an audio system

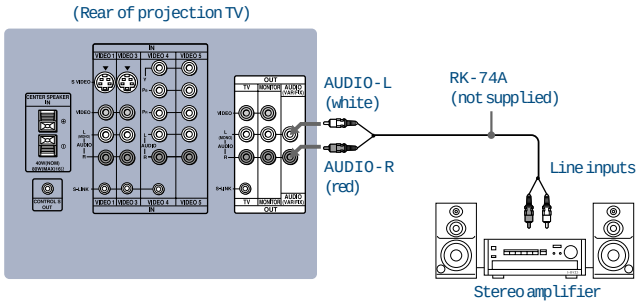
For more dynamic sound, connect an audio system to the projection TV.

1 Using an AUDIO cable, connect AUDIO (VAR/FIX) OUT on the projection TV to one of the unused Line inputs (e.g. Tape-2, AUX1, etc.) on the stereo.

2 Set the stereo to the chosen Line input and use the Audio menu to set the audio output and switch the TV's speakers off. (see "Audio Out" and "Speaker" on page 32)

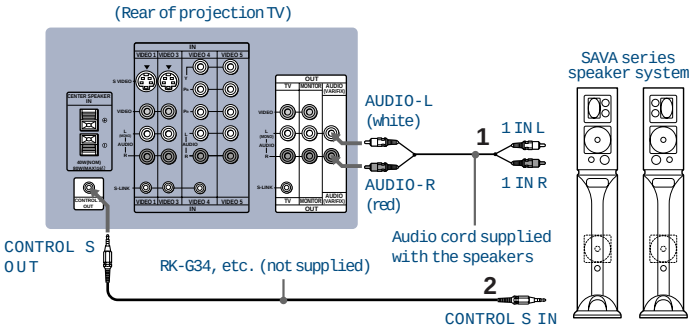
Note:

- You can adjust VOLUME, "Bass," "Treble," "Balance," "MTS/SAP" and "Effect" with the supplied remote control. The control items except VOLUME can be adjusted only when "Audio Out" is set to "Variable" in the Audio menu. (see "Audio Out" on page 32)



Connecting a Sony SAVA series speaker system

Use this connection to control the speaker's Dolby Pro Logic surround system and super woofer mode with the remote control. (see "Speaker" and "SAVA SP Control" on page 32)



Disconnect all power sources before making any connections.

1 Using the AUDIO cable supplied with the speaker to AUDIO (VAR/FIX) OUT on the projection TV.

2 Using the CONTROL S cable, connect CONTROL S IN on the speaker to CONTROL S OUT on the projection TV.

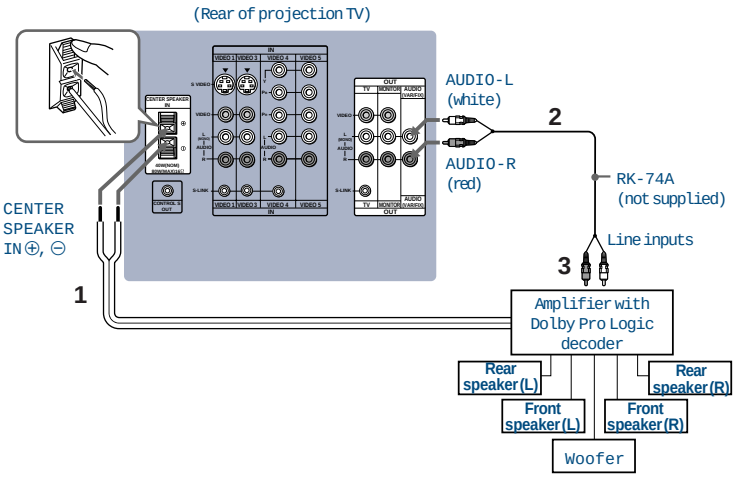
Connecting an amplifier that supports Dolby Pro Logic decoder

If you use an amplifier with a Dolby Pro Logic decoder instead of the projection TV's audio system, you can still use the projection TV's center speaker.

1 Using the speaker cords (supplied with the amplifier), connect the speaker terminals on the amplifier to CENTER SPEAKER IN +/– on the projection TV.

2 Using an AUDIO cable, connect AUDIO (VAR/FIX) OUT on the projection TV to one of the unused Line inputs (e.g. Tape-2, AUX1, etc.) on the amplifier (White-AUDIO Left, red-AUDIO Right).

3 Set the amplifier to the chosen Line input and use the Audio menu to set "Speaker" to "Center" on the projection TV. (see "Speaker" on page 32)



Installing and Connecting the Projection TV (continued)

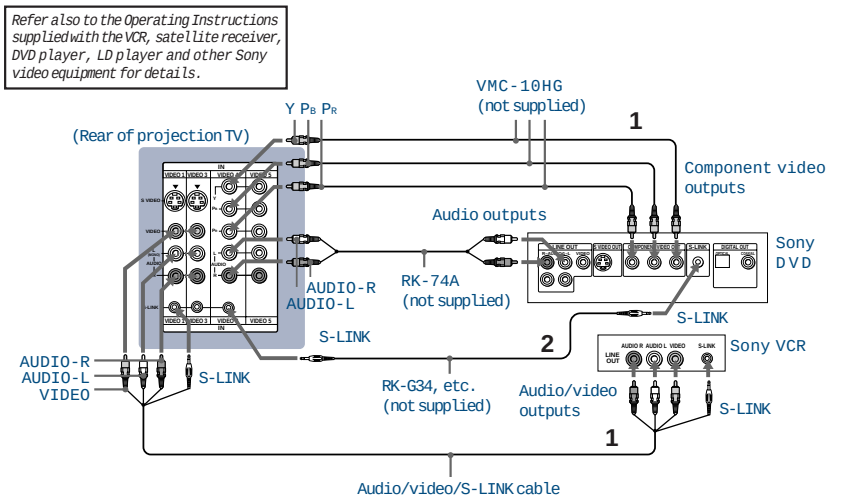
Disconnect all power sources before making any connections.

Using the S-Link Function

S-Link is a Sony innovation designed to make the Sony components work together. It allows you to automatically switch the projection TV's input mode to video when you press the play button on the Sony S-Link VCR.

Using the S-Link function without a Sony AV receiver

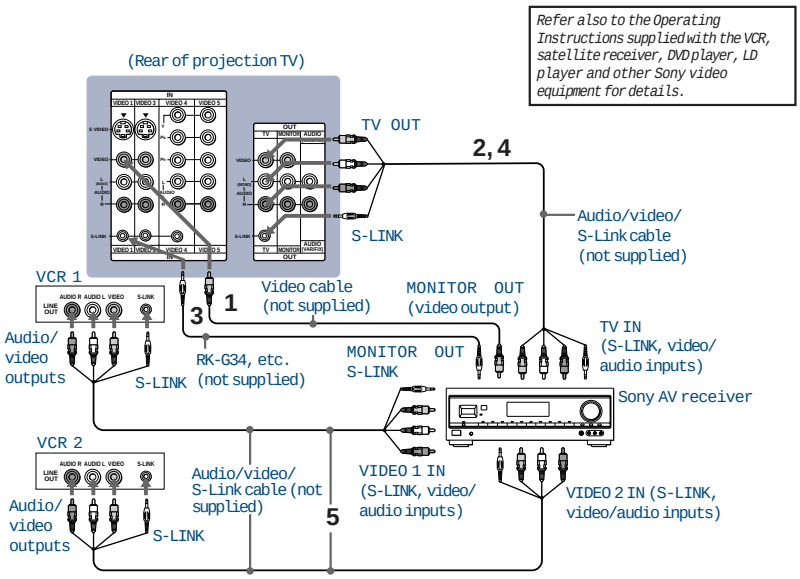
1. Connect the Sony VCR (DVD). (see "Connecting a cable TV system/antenna to a VCR" on page 6 or "Connecting a DVD Player with component video output connectors" on page 12)
2. Using an S-LINK cable, connect the S-LINK jacks on the VCR (DVD) and the projection TV. Ensure that both ends are seated firmly and that the projection TV's S-LINK jack is in the same row as the AUDIO/VIDEO cable extending from the Sony VCR (DVD).



Disconnect all power sources before making any connections.

Using the S-Link function with a Sony AV receiver

1. Using a VIDEO cable, connect VIDEO 1 IN on the projection TV to MONITOR OUT on the Sony AV receiver.
2. Using an AUDIO/VIDEO cable, connect TV OUT on the projection TV to TV AUDIO and VIDEO IN on the AV receiver.
3. Using an S-LINK cable, connect S-LINK on the VIDEO 1 IN panel on the projection TV and S-LINK on MONITOR OUT on the AV receiver.
4. Using an S-LINK cable, connect S-LINK on the TV OUT panel on the projection TV to S-LINK on TV IN on the AV receiver.
5. Using AUDIO/VIDEO and S-LINK cables, connect the Sony video equipment to the AV receiver.
6. Use the Audio menu to set "Speaker" to "Off" or "Center." (see "Speaker" on page 32)
7. Press CH (CHANNEL) +/– to activate the S-Link function.

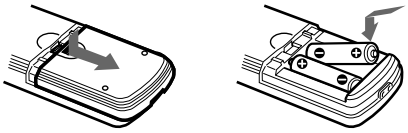


Basic Set Up

Using the Remote Control

Inserting the batteries

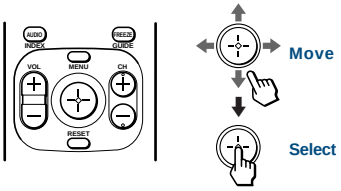
Insert two size AA (R6) batteries (supplied) by matching the + and – on the batteries to the diagram inside the remote control's battery compartment.



Notes:

- Remove the batteries to avoid damage from possible battery leakage whenever you anticipate that the remote control will not be used for an extended period.
- Handle the remote control with care. Avoid dropping it, getting it wet, or placing it in direct sunlight, near a heater or where the humidity is high.
- Your remote control can be programmed to operate most video equipment. (see "Operating Video Equipment" on page 51)

Using the remote control joystick



The supplied remote control has a joystick which moves the on-screen selector in four directions. In most cases, moving the joystick up, down, left or right will cause the selector to *move* in the selected direction.

In some cases, the selector may move in four directions according to the function. Pressing down on the center of the joystick (⊕) will *activate* the selected item.

You may also move the joystick right to activate a selected item. (There are some exceptions to this option.)

Adjusting Sliders

When menu items present a slider (▬ or ▬), move the joystick up, down, left or right to adjust the setting.

On Line Help/Instructions

Several menu windows will provide prompts and instructions to assist you in navigating through the different functions.

Setting Up the Projection TV Automatically

The AUTO SET UP feature will allow you to set the on-screen language and set all receivable channels.

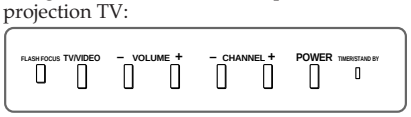
The AUTO SET UP feature does not apply for installations that use a cable box for all channel selection.

You can also set up the projection TV manually. (see "Using the Channel Set Up menu" on pages 34 and 35)

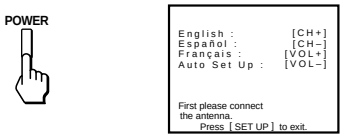
Notes:

- Before you perform AUTO SET UP again, make sure that the input from ANT (not AUX) is selected by pressing ANT until "AUX" does not appear next to the channel number.
- Perform this function during the day, with the antenna and/or cable properly connected, to ensure that all available channels will be broadcasting and receivable.
- When you perform AUTO SET UP, all the settings in the Video, and Audio menus are reset to the factory settings.

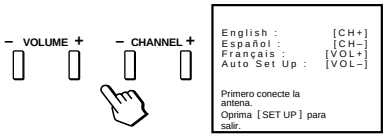
Using the buttons on the front panel of the projection TV:



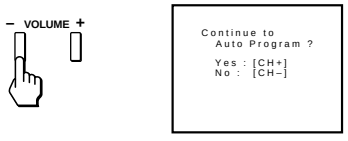
1 Press POWER to turn on the projection TV.
The AUTO SET UP screen appears.



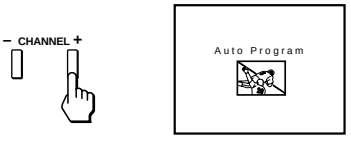
2 Press CHANNEL + to select English, CHANNEL – to select Español or VOLUME + to select Français.
The screen will change to reflect your choice.



3 Press VOLUME – to continue.



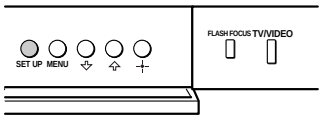
4 Press CHANNEL + to preset channels automatically.



"Auto Program" appears and the projection TV starts scanning and presetting channels automatically. While scanning, the received channel will be displayed on the sub screen. When all the receivable channels are stored, the lowest numbered channel is displayed.

Basic Set Up (continued)

To perform AUTO SET UP again



Press SET UP inside the drop-down panel on the projection TV and perform steps 2-4 on page 19.

Press SET UP again to exit.

Adjusting the Convergence Automatically (FLASH FOCUS)

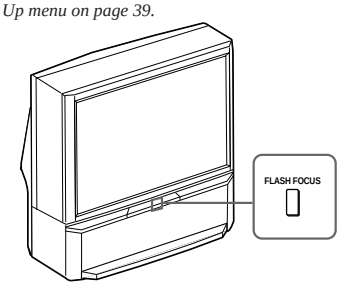
The projection tube image appears on the screen in three layers (red, green and blue). If they do not converge, the color is poor and the picture blurs.

Before you use your projection TV, be sure to adjust the convergence.

The FLASH FOCUS feature allows you to adjust the convergence automatically.

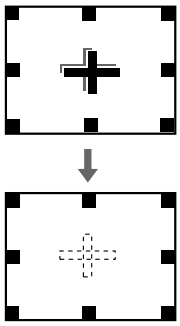
Tips

- *It is recommended to perform FLASH FOCUS about 30 minutes after the projection TV is first turned on.*
- *You can also perform FLASH FOCUS using the Set Up menu on page 39.*



Press FLASH FOCUS.

The cross pattern appears and FLASH FOCUS begins to work. The adjustment is completed when the cross pattern becomes white.



Note:

- FLASH FOCUS is canceled if you perform any other function while FLASH FOCUS is working.

Using Your New Projection TV

Watching the TV

Many TV features can be accessed directly through the remote control. The following chart will explain the function of some buttons found on your remote control.

REFER TO THE ILLUSTRATION OF THE REMOTE CONTROL ON THE INSIDE FRONT COVER OF THIS MANUAL AS YOU REVIEW THIS CHART

Using the White Labeled Buttons for Projection TV Operations	
TV (FUNCTION)	Activates the remote control for use with the projection TV.
TV POWER	Turns the projection TV on and off. If a video input indication (e.g., VIDEO 1, VIDEO 2) appears on the screen, press TV/VIDEO until a channel number appears.
0 - 9 and ENTER	Use for direct channel selection. Press 0-9 to select a channel (for example, to select channel 10, press 1 and 0). The channel will change after 2 seconds, or you can press ENTER for immediate selection.
CH +/–	Press to scan through the channels (+ up or – down). **Speed Surf** **1** Press and hold CH + or – to change the channel number rapidly. **2** Release to display the desired channel.
VOL +/–	Press to adjust the volume (+ up or – down).
MUTING	Press to mute the sound. “Muting” will appear on the screen and will dim three seconds later. To restore sound, press again or press VOL +.

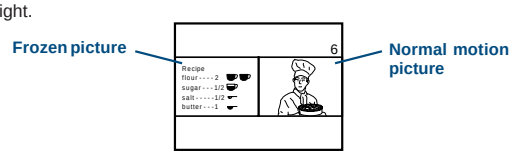
(continued)

PICTURE MODE

Press PICTURE MODE repeatedly to directly choose one of five different video modes that best suits the program you are watching.
Vivid: Select for enhanced picture contrast and sharpness.
Standard: Select to display a standard picture for normal viewing environments.
Movie: Select to display a finely detailed picture for low light environments.
Personal 1, Personal 2: Select to customize the “Picture Adjustment” of the Video menu according to your personal preference.

When you select “Movie,” “Personal 1” and “Personal 2,” you can also perform the “Picture Adjustment” (such as “Brightness,” “Color,” etc.) to suit your taste. For details, see “Mode” on page 30.

Using Your New Projection TV (continued)

Using the White Labeled Buttons for Projection TV Operations	
TV/VIDEO	Press repeatedly to scroll through available video inputs: **TV, VIDEO 1, VIDEO 2, VIDEO 3, VIDEO 4** and **VIDEO 5.** If you select "Skip" as a "Video Label" in the Set Up menu, your projection TV will skip the video input you selected. (see "Video Label" on page 39)
JUMP	Press to alternate or *jump* back and forth between two channels. The projection TV will jump between the current channel and the last channel selected using the 0-9 buttons.
FREEZE *(yellow labeled button)*	This is useful when you need to copy down information that appears on the TV's screen. Press to *freeze* the desired picture. The frozen picture is displayed on the left of the screen while viewing the normal picture of the current channel on the right.  Press again to display the normal picture.
DISPLAY	Press to display the channel number, current time, channel caption (if set), and MTS mode (if SAP is selected). The SAP indication disappears and the other indications dim three seconds later. To turn the display off, press DISPLAY again.

Tip

Some control buttons are located under the cover on the top of the remote control. They are indicated with (under the cover) in the table.

Using the White Labeled Buttons for Projection TV Operations	
CC *(under the cover)*	Press repeatedly to scroll through available displays: **XDS (Extended Data Service)** Displays a network name, program name, program type, program length, program description, call letters and time of the show if the broadcaster offers this service. **Caption Vision** Displayed on the screen if the broadcaster offers this service. (see "Caption Vision" on page 38) **No display** "Off" appears and the display is canceled.
SLEEP *(under the cover)*	Press repeatedly until the projection TV displays the approximate time in minutes (30, 60, or 90) that you want the projection TV to remain on before shutting off automatically. Cancel by pressing until "Sleep Off" appears.
ANT *(AUX input)*	Press to change between the VHF/UHF input and the AUX input. (for detailed connection information, see "Cable and antenna" or "Cable box and cable" on page 5)
MTS/SAP *(under the cover)*	Press to scroll through the Multi-channel TV Sound (MTS) options: **Stereo, SAP, Mono** and **Auto SAP.** (see "MTS/SAP" on page 31)
♪	Press to select an audio option: **Trusurround, Simulated** and **Effect Off.** (see "Effect" on page 31)
TV/VTR *(under the cover)*	Press when you are finished using a VCR and you want to switch to the TV input. The VCR power will remain on.
SYSTEM OFF *(under the cover)*	Press to turn off the projection TV and all other equipment connected with S-Link. (see page 16)

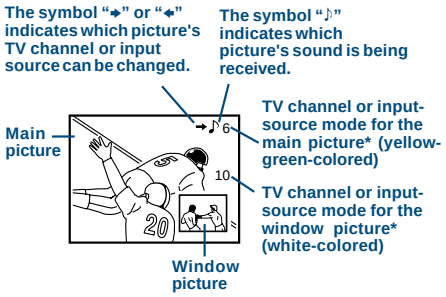
REFER TO THE ILLUSTRATION OF THE REMOTE CONTROL ON THE INSIDE FRONT COVER OF THIS MANUAL AS YOU REVIEW THIS CHART

Using Your New Projection TV (continued)

Watching Two Programs at One Time — PIP

The Picture-in-Picture (PIP) feature allows you to view two channels simultaneously, one in the full size "main" picture and one in a smaller "window" picture.

You can move the window picture to any location on the screen.


The symbol "➔" or "➔" indicates which picture's TV channel or input source can be changed.
The symbol "♪" indicates which picture's sound is being received.
Main picture
TV channel or input-source mode for the main picture* (yellow-green-colored)
TV channel or input-source mode for the window picture* (white-colored)
Window picture
6
10
20

* It will dim in about 3 seconds.

Tip

If you press RESET in PIP mode, the window picture will move to the bottom right (factory-preset location).

Using the Yellow Labeled Buttons for PIP Operations	
	Press to display a window picture. Each time you press this button, the picture size will change (1/4 →1/9 →1/16 →no display). To close the window picture, press repeatedly until it disappears.
POSITION *(under the cover)*	Press to change the location of the window picture (counterclockwise) around the main picture.
ACTIVE	Press to select either the main or window picture in order to change the TV channel or video source using the white labeled buttons below. The symbol "➔" (or "➔") will appear to indicate which picture's channel or input mode can be changed.
(white labeled button)	To change the location of the window picture, move the joystick in any direction and release it when the picture is in the desired location.
TV/VIDEO *(white labeled button)*	Press repeatedly to scroll through the available video inputs for the picture on which the symbol "➔" (or "➔") is displayed. (see "TV/VIDEO" on page 22)

Using the Yellow Labeled Buttons for PIP Operations	
CH or 0 - 9 or JUMP and ENTER *(white labeled button)*	Press to select the TV channel on which the symbol "➔" is displayed. (for details, see "Watching the TV" on page 21) **Speed Surf** **1** Press and hold CH + or – to change the channel number rapidly. **2** Release to display the desired channel.
ANT *(white labeled button)*	Press to change between the VHF/UHF input and the AUX input for the picture on which the symbol "➔" (or "➔") is displayed.
AUDIO INDEX	Press to alternate sound between the main picture and the window picture. The symbol " ♪ " will appear for a few seconds to indicate which picture's sound is being received.
FREEZE GUIDE	This is useful when you need to copy down information of the main picture. Press to freeze the desired scene in the main picture. The frozen picture is displayed in the window picture while viewing the normal picture in the main picture. The window picture size is automatically changed to 1/4 if it was 1/9 or 1/16. Press again to resume normal PIP viewing.
SWAP *(under the cover)*	Press to switch the audio and video of the main picture and the window picture. Each time you press SWAP, the picture and sound of the two will be exchanged.

REFER TO THE ILLUSTRATION OF THE REMOTE CONTROL ON THE INSIDE FRONT COVER OF THIS MANUAL AS YOU REVIEW THIS CHART

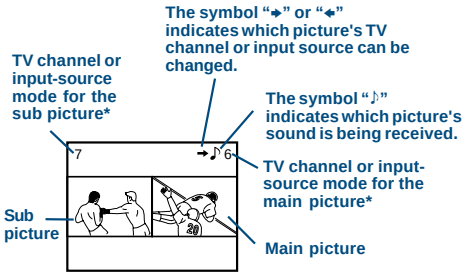
Note:

- If one of the pictures received through PIP is snowy, the entire screen may become unstable. In this case, erase the snowy channel. (see "Channel Skip/Add" on page 35)

Using Your New Projection TV (continued)

Watching Two Programs at One Time — P&P (Twin View™)

The Picture-and-Picture (P&P) feature allows you to view two channels simultaneously, both in a reduced size screen. The main picture will appear on the right.


The symbol "➔" or "➔" indicates which picture's TV channel or input source can be changed.
TV channel or input-source mode for the sub picture*
The symbol "♪" indicates which picture's sound is being received.
TV channel or input-source mode for the main picture*
Sub picture
Main picture
7
6

* It will dim in about 3 seconds.

Using the Yellow Labeled Buttons for P&P Operations	
(◨)	Press to display right (main) and left (sub) pictures. Press again to close the sub picture.
ACTIVE (⇆)	Press to select either the right or left picture in order to change the TV channel or video source using the white labeled buttons below. The symbol "➔" (or "➔") will appear to indicate which picture's channel or input mode can be changed.
TV/VIDEO *(white labeled button)*	Press repeatedly to scroll through the available video inputs for the picture on which the symbol "➔" (or "➔") is displayed. (see "TV/VIDEO" on page 22)
CH (+ / –) or (0) - (9) or **JUMP** and ENTER *(white labeled button)*	Press to select the TV channel on which the symbol "➔" (or "➔") is displayed. (for details, see "Watching the TV" on page 21) **Speed Surf** **1** Press and hold CH + or – to change the channel number rapidly. **2** Release to display the desired channel.
ANT *(white labeled button)*	Press to change between the VHF/UHF input and the AUX input for the picture on which the symbol "➔" (or "➔") is displayed.

Using the Yellow Labeled Buttons for P&P Operations	
AUDIO INDEX	Press to alternate sound between the right and left pictures. The symbol "♪" will appear for a few seconds to indicate which picture's sound is being received.
FREEZE GUIDE	This is useful when you need to copy down information that appears on the TV's screen. Press to freeze both the right and left pictures. Press again to resume P&P viewing.
SWAP *(under the cover)*	Press to switch the audio and video of the right and left pictures. Each time you press SWAP, the picture and sound of the two will be exchanged.

REFER TO THE ILLUSTRATION OF THE REMOTE CONTROL ON THE INSIDE FRONT COVER OF THIS MANUAL AS YOU REVIEW THIS CHART

Notes:

- The sound of the left (sub) picture is monaural.
- Caption Vision is displayed for the right (main) picture only.
- If one of the pictures received through P&P is snowy, the entire screen may become unstable. In this case, erase the snowy channel. (see "Channel Skip / Add" on page 35)

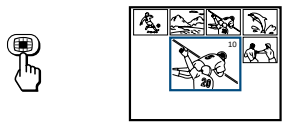
Using Your New Projection TV (continued)

Using CHANNEL INDEX

You can use the CHANNEL INDEX feature to display multiple channels and select one directly.
Channels used for CHANNEL INDEX will come directly from the TV's list of receivable channels (those set during Auto Program or through the Channel Set Up menu).

1 Press ▣.

The current channel will be reduced in size and displayed in the center of the screen in normal motion picture format. The first twelve receivable channels will appear one after another, clockwise, around the center picture. These small pictures are updated in intervals of one second. The channel number and channel caption (if set) on the second and later appearances will dim.

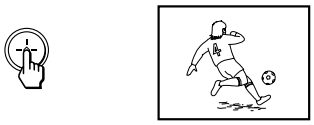


A yellow-colored frame will appear to indicate current channel selection.

2 Move the joystick in any direction to move the yellow frame to the picture that you wish to view.

3 Press ⊕.

The selected picture will be enlarged for normal viewing.



To cancel CHANNEL INDEX

Press ▣ again, or select a TV channel using the 0-9 and ENTER buttons.

Tips

- *To cycle through the receivable channels at a time, press CH +/–.*
- *To freeze the center picture, press FREEZE. Press it again to resume normal center picture viewing.*

Notes:

- The projection TV will continually update each of the surrounding pictures while the CHANNEL INDEX screen is displayed.
- Sound will only be heard from the center picture.
- If one of the pictures received through CHANNEL INDEX is snowy, the entire screen may become unstable. In this case, erase the snowy channel. (see "Channel Skip/Add" on page 35)
- If you leave the CHANNEL INDEX screen displayed for about 20 minutes without any additional operation, CHANNEL INDEX is canceled and the normal picture reappears.

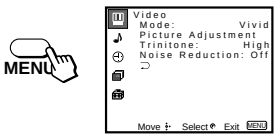
Adjusting Your SET UP (menus)

Learning Menu Selection

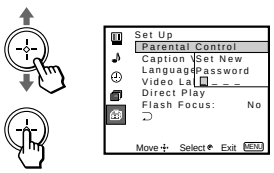
Use the MENU button to access a menu and use the joystick to alter the settings. Use the following example to learn how to modify settings.

1 Press the MENU button.

The main menu appears.



2 Move the joystick up or down to highlight the desired menu and press ⊕ (press down on the center of the joystick) to activate it.

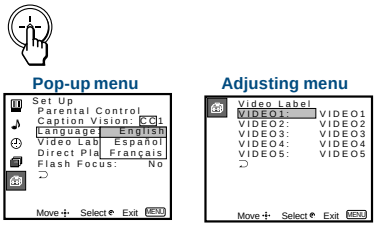


You may also move the joystick right to activate your selection.

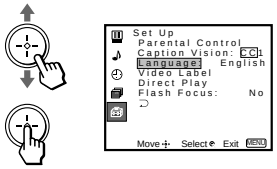
3 Move the joystick up or down to highlight the desired option.

4 Press ⊕ (press down on the center of the joystick).

Options for your selection (Pop-up menu or Adjusting menu) will be displayed.



5 Move the joystick up or down to make your selection and press ⊕ to activate it. The previous screen will reappear.



Some adjustment menus may require further operations. For details, see each menu option.
To return to the previous screen (except for the slider adjustment menus), choose "⮌" at the bottom of the menu and press ⊕ or move the joystick left.

6 Once you have completed all menu corrections, press MENU to exit the menu screens.

To exit from the menus at any time

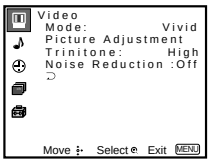
Press MENU.

Tip

You can also use the MENU, ⇧/⇩ and ⊹ buttons inside the front drop-down panel of the projection TV for the menu selection.

Adjusting Your SET UP (menus) (continued)

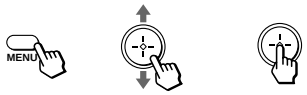
Using the Video Menu



For detailed information on using the remote control to modify menu settings, refer to "Learning Menu Selection" on page 29.

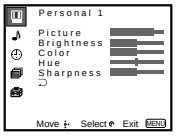
To select the Video menu:

Display → Highlight → Select

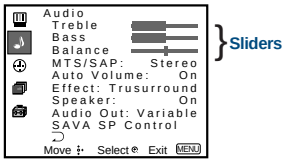


To restore the factory settings

Press RESET on the remote control while the Video menu is selected. To restore each "Mode" to the factory setting, press RESET after selecting the mode to be reset.

Mode *Customized picture viewing*	You can choose one of five different video modes that best suits the program you are watching. You can also perform the "Picture Adjustment" (such as "Brightness," "Color," etc.) for "Movie," "Personal 1" or "Personal 2" to suit your taste. **Vivid:** Select for enhanced picture contrast and sharpness. **Standard:** Select to display a standard picture for normal viewing environments. **Movie:** Select to display a finely detailed picture for low light environments. **Personal 1, Personal 2:** Select to customize the "Picture Adjustment" of the Video menu according to your personal preference. *Press PICTURE MODE on the remote control for direct selection of a "Mode" setting.*
Picture Adjustment *Picture adjustment*	First select "Movie," "Personal 1" or "Personal 2" from "Mode," then highlight the desired option using the joystick and press ⊕ to display the adjusting slider of the selected option. **Picture:** Adjust slider right (up) to increase picture contrast; left (down) to decrease it. **Brightness:** Adjust slider right (up) to brighten the picture; left (down) to darken it. **Color:** Adjust slider right (up) to increase color intensity; left (down) to decrease it. **Hue:** Adjust slider right (up) to increase the green tones; left (down) to increase the red tones. **Sharpness:** Adjust slider right (up) to sharpen the picture; left (down) to soften it. 
Trinitone *White intensity adjustment*	**High:** Select to give the white colors a blueish tint. **Medium:** Select to give the white colors a neutral tint. **NTSC Standard:** Select to give the white colors a reddish tint.
Noise Reduction *Noise reduction*	Select **On** to reduce picture noise. Select **Off** to cancel the feature. *"Noise Reduction" can be set separately from the "Mode" settings of the Video menu.*

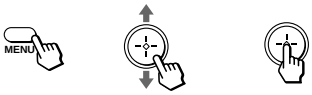
Using the Audio Menu



For detailed information on using the remote control to modify menu settings, refer to "Learning Menu Selection" on page 29.

To select the Audio menu:

Display → Highlight → Select



To restore the factory settings

Press RESET on the remote control while the Audio menu is selected.

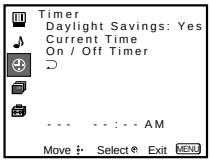
Treble *Sound adjustment*	Adjust slider right (up) to increase high pitched sounds. Adjust slider left (down) to decrease high pitched sounds.
Bass *Sound adjustment*	Adjust slider right (up) to increase low pitched sounds. Adjust slider left (down) to decrease low pitched sounds.
Balance *Sound adjustment*	Adjust slider right (up) to emphasize right speaker volume. Adjust slider left (down) to emphasize left speaker volume.
MTS/SAP *Enjoy stereo, bilingual and mono programs.*	When the sound is intermittent due to poor reception conditions, select "Stereo" or "SAP." **Stereo:** Select for stereo reception when viewing a program broadcast in stereo. **SAP:** Select to listen to a bilingual broadcast. (non-SAP programs will be muted when this feature is selected) **Mono:** Select for mono reception. (use to reduce noise during stereo broadcasts) **Auto SAP:** Select to listen to SAP when a SAP program is broadcast and return to stereo reception automatically for non-SAP programs. ***Quick MTS access:*** *Press MTS/SAP on the remote control to cycle through the "MTS/SAP" options as follows: Stereo → SAP → Mono → Auto SAP.*
Auto Volume *Adjust the sound level.*	**On:** Sound output coming from TV speakers have the volume level equalized for all channel audio inputs when broadcasts have different sound transmission levels. **Off:** Sound output coming from the TV speakers varies according to the received channel.
Effect *Customizes surround sound effects based on the program's audio type.*	"Effect" can only be set when "Speaker" is set to "On" or "Off." **Trusurround:** Produces a virtual surround effect for Dolby-surround encoded programs. **Simulated:** Adds a surround-like effect to mono programs. **Off:** Normal stereo or mono reception. ***Quick Effect access:*** *Press ♪ on the remote control to cycle through the "Effect" options as follows: Trusurround → Simulated → Effect Off.*

(continued)

Adjusting Your SET UP (menus) (continued)

Speaker *Custom selection of audio output source*	**On:** Select to listen to the sound from the projection TV speakers alone. **Off:** Select to turn off the projection TV speakers and listen to the projection TV's sound only through an external audio system's speakers. **SAVA SP:** Select to turn off the projection TV speakers and listen to the projection TV's sound only through the Sony SAVA series speaker system. You can adjust volume, muting, "Surround Mode," and "Super Woofer Mode" with the projection TV's remote control. (see "SAVA SP Control" below) **Center:** Select to use the projection TV as center speaker when you connect an amplifier with a Dolby Pro Logic decoder. (see "Connecting an amplifier that supports Dolby Pro Logic decoder" on page 15)
Audio Out *Easy control of volume adjustment*	"Audio Out" can only be set when "Speaker" is set to "Off." **Fixed:** Sound output is held at a fixed level through the audio system. Use the AV receiver's remote control to adjust the volume. **Variable:** Sound output varies according to the TV settings. Useful when you want to use your remote control to control the output of a separate audio system.
SAVA SP Control *Controls Sony SAVA speaker's mode.*	"SAVA SP Control" can only be set when Sony SAVA speaker system is connected to the AUDIO (VAR/FIX) OUT connectors and "Speaker" is set to "SAVA SP." (see "Speaker" above) You can also adjust the SAVA speaker's volume using VOL +/– of the projection TV's remote control. **Surround Mode:** Select to activate the SAVA Speaker's surround mode. **Super Woofer Mode:** Select to activate the SAVA Speaker's super woofer mode.

Using the Timer Menu

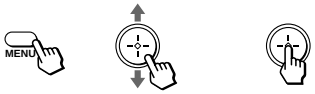


After setting the clock you can use the timer to turn the projection TV on and off.

For detailed information on using the remote control to modify menu settings, refer to "Learning Menu Selection" on page 29.

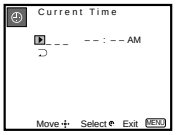
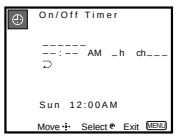
To select the Timer menu:

Display → Highlight → Select



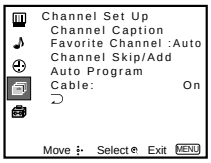
Tip

Set daylight saving time before setting the clock. Any loss of power will cause these settings to be erased.

Daylight Savings *Automatically adjusts the time.*	**Spring:** Select **Yes** to compensate for Daylight Saving Time. The current time automatically moves ahead one hour. **Fall:** Select **No** at the end of Daylight Saving Time. The current time moves back one hour.
Current Time *Necessary for the Timer.*	**1** Press ⊕, then move the joystick up or down until the current day (Sun - Sat) is displayed, and press ⊕. **2** Move the joystick up or down until the current hour (1-12) and AM/PM is displayed, and press ⊕. **3** Move the joystick up or down until the current minute (00-59) is displayed, and press ⊕. The clock has now started. Press MENU to exit. 
On/Off Timer *Wake up or scheduled viewing.*	**1** Move the joystick up or down until the desired day or range of days (Every Sun-Sat, Every Mon-Fri, Sunday, Monday, ...Saturday, Every Sunday, ...Every Saturday) is displayed, and press ⊕. **2** Move the joystick up or down until the time (hours and minutes) that you want the projection TV to remain on is displayed, and then press ⊕. **3** Move the joystick up or down to set the time duration (maximum of 6 hours) and press ⊕. **4** Move the joystick up or down to select the desired channel and press ⊕. The timer is now set. The TIMER/STAND BY indicator on your projection TV will be lit. Press MENU to exit. To cancel your timer setting, press RESET while in the On/Off Timer window. Performing Auto Program will erase all Timer settings. 

Adjusting Your SET UP (menus) (continued)

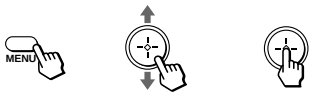
Using the Channel Set Up Menu

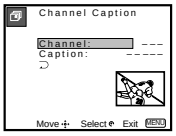


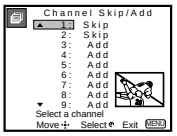
For detailed information on using the remote control to modify menu settings, refer to "Learning Menu Selection" on page 29.

To select the Channel Set Up menu:

Display → Highlight → Select



Channel Caption *Easy recognition of the channel you are watching*	You can add a caption for up to 32 channels of VHF/UHF input. With the Channel Caption window open: **1** Press ⊕ and then move the joystick up or down to select the desired channel. You can view the channel that is selected with the Channel Caption menu in the sub screen. **2** Press ⊕. **3** Move the joystick up or down to display the first letter or number of the caption and press ⊕ to select it. Repeat until up to five digits are selected. **4** Press ⊕. *To erase a caption, press RESET.* 
Favorite Channel *User's favorite channels*	The Favorite Channel feature enables easy access to the eight channels that you preset (or the last channel that you were watching). (for details on how to set up this feature, see "Setting and Selecting Favorite Channel" on page 36)

Channel Skip/Add *Skips unnecessary channels.*	After AUTO SET UP, you can erase unnecessary channels from the channel preset memory. With the Channel Skip/Add window open: **1** Move the joystick up or down to select the desired channel. You can view the channel that is selected with the Channel Skip/Add menu in the sub screen. You can also use CH +/– or 0–9 and ENTER buttons. **2** Press ⊕. **3** Move the joystick up or down to select **Skip**, and press ⊕. The selected channel will be erased. If you want to re-enter the skipped channel, follow the steps above and select **Add**. 
Auto Program *Automatic channel presetting*	Select **Yes** to signal the projection TV to automatically program all receivable channels. When all the receivable channels are stored, the lowest numbered channel is displayed. Select **No** to cancel Auto Program.
Cable *Cable system setting*	Select **On** if your projection TV is connected to a cable system. Select **Off** if your projection TV is connected to an antenna.

Adjusting Your SET UP (menus) (continued)

Setting and Selecting Favorite Channel

The Favorite Channel feature of your projection TV enables easy access to the eight channels that you preset (or the last channel that you were watching).

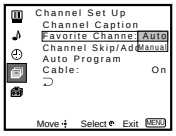
Your Favorite Channel options can be set automatically or manually.

The factory setting for "Favorite Channel" is "Auto."

When "Favorite Channel" is set to "Auto," the last eight channels selected with the 0–9 buttons will be set as Favorite Channel options. If you want to input your own selections as Favorite Channel settings, set to "Manual."

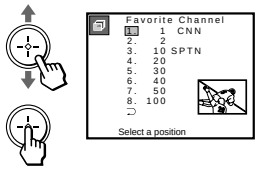
Setting Favorite Channel manually

1 Select "Favorite Channel" from the Channel Set Up menu. (see page 34)

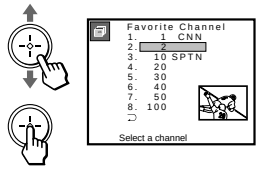


2 Move the joystick up or down to select "Manual" and press ⊕.

The Favorite Channel menu will appear. If you set Channel Caption names (e.g. CNN, HBO), they will also be displayed. (see "Channel Caption" on page 34)

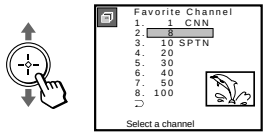


3 Move the joystick up or down to select a position (1–8), and press ⊕.



4 Move the joystick up or down to select a channel.

You have now selected a favorite channel.



5 Press ⊕ and use the joystick to program other favorite channels. (Follow steps 3 and 4.)

6 Press MENU when you have finished.

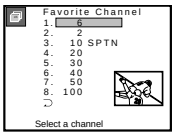
Your favorite channels are now ready for use.

Changing Favorite Channel choices

You have the option of returning to the Favorite Channel screen to adjust any of your favorite channel choices.

Simply proceed as described in "Setting Favorite Channel manually" (skip step 2 if "Manual" is already selected).

When you reach step 3, select the position you want to change and press ⊕. Move the joystick up or down to select a new channel.



Press MENU when you are done.

Note:

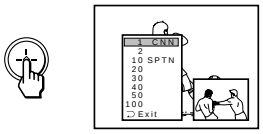
- The Favorite Channel feature is not available for the picture input from AUX.

Using Favorite Channel

You can use the Favorite Channel feature to directly select the channel you want to watch.

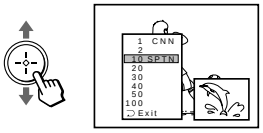
1 Press ⊕ once.

The favorite channel menu and a window picture will be superimposed over the current channel. The window picture displays the channel selected from the menu.



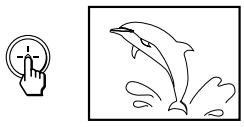
2 Move the joystick up or down to select the channel that you wish to view from the menu.

The picture of the selected channel will be displayed in the window picture.



3 Press ⊕ to select the channel.

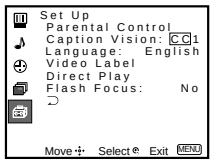
The selected channel will be displayed for normal viewing.



To cancel the favorite channel menu before selecting a channel, move the joystick up or down to select "Exit" at the bottom of the menu and press ⊕.

Adjusting Your SET UP (menus) (continued)

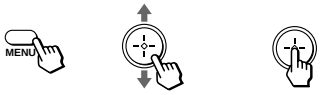
Using the Set Up Menu



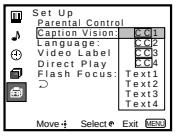
For detailed information on using the remote control to modify menu settings, refer to "Learning Menu Selection" on page 29.

To select the Set Up menu:

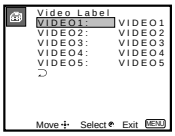
Display → Highlight → Select

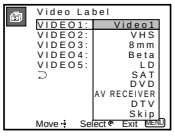


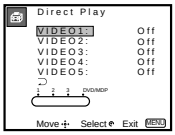
Parental Control *Blocks programs unsuitable for children.*	Allows you to block TV programs that you feel are unsuitable for your children. (see "Using the Parental Control Feature" on page 40 for details)
Caption Vision *Television closed caption display*	Some programs are broadcast with Caption Vision. To display Caption Vision, select CC1, CC2, CC3, CC4, TEXT1, TEXT2, TEXT3 or TEXT4 from the menu. Then press the CC button until "Caption Vision" is displayed. CC1, CC2, CC3 or CC4 displays a printed version of the dialogue or sound effects of a program. (The mode should be set to CC1 for most programs.) TEXT1, TEXT2, TEXT3, or TEXT4 displays network/station information presented using either half or the whole screen. **Notes:** • Poor reception of TV programs can cause errors in Caption Vision and XDS. Captions may appear with a white box or other errors instead of the intended text. • XDS, Caption Vision, and the status display cannot be used at the same time.
Language *Preferred language*	Select from available languages (**English, Español** or **Français**) to display all menus in your language of choice.

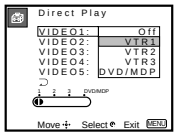


Video Label *Easy recognition of connected equipment (e.g. SAT, VHS, etc.)*	This feature allows you to label each input mode so that you can easily identify the connected equipment (e.g. you can label VIDEO 1 IN as VHS). With the Video Label window open: **1** Move the joystick up or down to select the input mode you want to label and press ⊕. **2** Move the joystick up or down to select the label and press ⊕. **Video Label Options:** **VIDEO 1**: VIDEO 1, VHS, 8mm, Beta, LD, SAT, DVD, AV RECEIVER, DTV, Skip **VIDEO 2/3**: VIDEO 2/VIDEO 3, VHS, 8mm, Beta, LD, SAT, DVD, DTV, Skip **VIDEO 4/5**: VIDEO 4/VIDEO 5, SAT, DVD, DTV, Skip *If you select "Skip," your projection TV will skip this connection when you scan through video sources using the TV/VIDEO button.*
Direct Play *Easy operation of a connected VCR*	This feature allows you to switch the input mode from the TV to a Sony VCR (MDP or DVD) and start playing by only pressing the ► (playback) button on the remote control. You have to set the VTR1/2/3/DVD/MDP switch on the remote control (e.g., you connect your VCR to the VIDEO 3 IN jacks and set the VTR1/2/3/DVD/MDP switch to VTR 3). With the Direct Play window open: **1** Move the joystick up or down to select the input to which your video equipment is connected, and press ⊕. **2** Move the joystick up or down to select the position of the VTR 1/2/3/DVD/MDP switch, and press ⊕.
Flash Focus *Automatic convergence adjustment*	Select **Yes** and press ⊕ to start Flash Focus adjustment. When the adjustment is completed, the cross pattern on the screen becomes white. (for details, see page 20) Select **No** to cancel Flash Focus.









Adjusting Your SET UP (menus) (continued)

Using the Parental Control Feature

The TV programs and movies shown on TV are given a rating signal based on the following rating systems.

In U.S.A.: U.S. Television Parental Guidelines to rate television programs (U.S. TV ratings), and Motion Picture Association of America (MPAA) Guidelines to rate movies including those shown on TV (movie ratings)

In Canada: Canadian English Language ratings to rate television programs in English, and Canadian French Language ratings to rate those in French.

To block programs you feel are unsuitable for your children, you need to set the TV for the desired rating systems. Sony's predetermined ratings are also available.

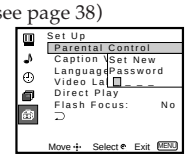
See pages 47 to 50 for a description of the ratings.

The Parental Control feature of the TV functions by receiving the rating signal from your local broadcasting station or cable service provider.

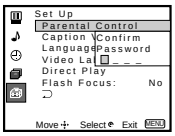
Activating the Parental Control Feature

First, set a password, then select your desired rating from Sony's predetermined ratings.

1 Select "Parental Control" from the Set Up menu. (see page 38)

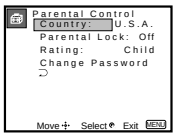


2 Enter a four digit password* using the 0–9 buttons.

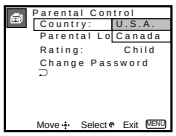


* Do not enter "4357" corresponding to "HELP" on a phone number pad. (see page 47)

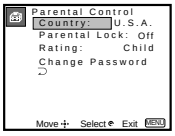
3 To confirm the password, re-enter the same password with the 0–9 buttons.
Your password is stored and the Parental Control menu automatically appears.
If you want to change the password, see page 46.



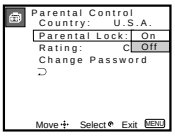
4 Make sure that "Country" is highlighted, and press ⊕.



5 Move the joystick up or down to select your country (U.S.A. or Canada), and press ⊕.

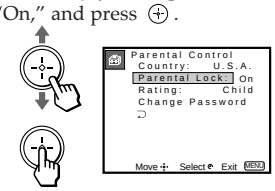


6 Move the joystick up or down to select "Parental Lock," and press ⊕.

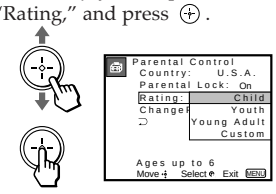


(continued)

7 Move the joystick up or down to select "On," and press ⊕.



8 Move the joystick up or down to select "Rating," and press ⊕.



9 Move the joystick up or down to select a desired rating ("Child," "Youth" and "Young Adult"), and press ⊕.

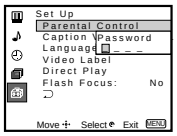
If you want to select the ratings from "Custom," go to step 4 of "Selecting a Custom Rating in U.S.A." on page 42 or "Selecting a Custom Rating in Canada" on page 45, according to your "Country" setting.

10 Press MENU to exit the menu.

To deactivate the Parental Control feature

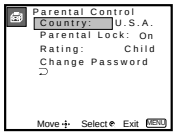
If you set "Parental Lock" in the Parental Control menu to "Off," the Parental Control feature will not work and you can view all TV programs and movies shown on TV.

1 Select "Parental Control" from the Set Up menu. (see page 38)

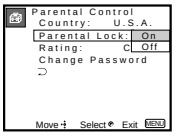


2 Enter your four digit password using the 0-9 buttons.

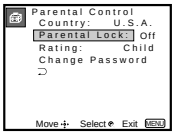
The Parental Control menu appears.



3 Move the joystick up or down to select "Parental Lock," and press ⊕.



4 Move the joystick up or down to select "Off," and press ⊕.



5 Press MENU to exit the menu.

Adjusting Your SET UP (menus) (continued)

To unlock the Parental Control feature temporarily

When you select a Parental Control program, no sound or picture except for a channel number will appear. The 🔒 indicator is displayed. To view the program, follow the steps below.

1 Press ENTER to display the "Password" screen.

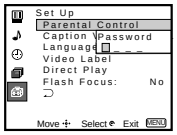
2 Enter your password using the 0–9 buttons. Parental Control will be canceled ("Parental Lock" set to "Off") until you turn your projection TV off.

Selecting a Custom Rating in U.S.A.

If you want to select the ratings to be blocked from "Custom" once you have activated the Parental Control feature (page 41), follow the procedure below.

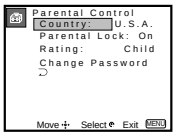
For a detailed description of each rating, see "What the Ratings Mean" on pages 47 to 49.

1 Select "Parental Control" from the Set Up menu. (see page 38)

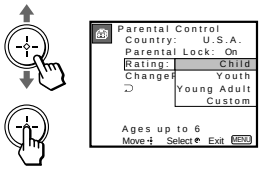


2 Enter your four digit password using the 0–9 buttons.

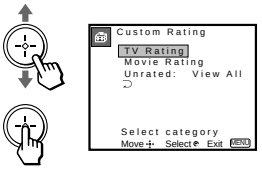
The Parental Control menu appears. Make sure that "Country" is set to "U.S.A."



3 Move the joystick up or down to select "Rating," and press ⊕.

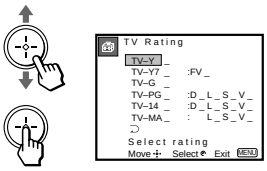


4 Move the joystick up or down to select "Custom," and press ⊕.

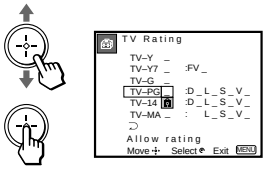


First, select a TV rating.

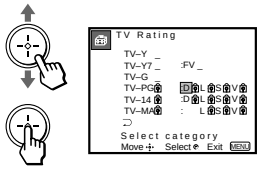
5 Move the joystick up or down to select "TV Rating," and press ⊕.



6 Move the joystick up or down to select the TV rating to be blocked, and press ⊕.



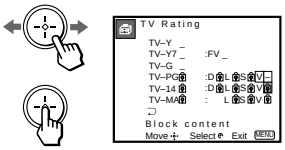
7 Move the joystick up or down to select "🔒," and press ⊕.
The 🔒 indicator automatically appears beside the selected rating and all "higher" ratings, indicating that the programs that match the ratings will be blocked.



Some ratings have additional content ratings called "extenders." The extenders are defined as follows: D (sexually suggestive Dialog), FV (Fantasy Violence), L (coarse Language), S (Sexual situations) and V (Violence). By setting the extenders, you can define additional viewing limits. For more details of extenders, see page 49.

All of the extenders included in the selected ratings will be blocked. If you wish to allow any of them to be viewed, go to step 8.

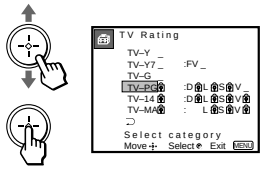
8 Move the joystick left or right to select the extender to be viewed, and press ⊕.



9 Move the joystick up or down to select "–," and press ⊕.

"–" appears beside the selected extender, indicating that the programs that match the extender can be viewed.

If you select "🔒," 🔒 is displayed to show that the programs that match the extender will be blocked again.



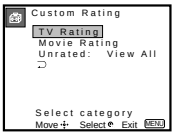
(continued)

Adjusting Your SET UP (menus) (continued)

10 Repeat steps 8 and 9 for other extenders.

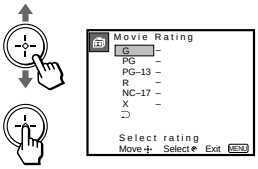
All programs that match the ratings you select and higher, except for the extenders that were canceled, will be blocked.

11 After setting of the TV rating is complete, move the joystick up or down to select "⮌," and press ⊕.

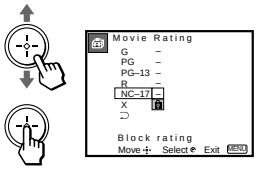


Second, select a movie rating.

12 Move the joystick up or down to select "Movie Rating," and press ⊕.

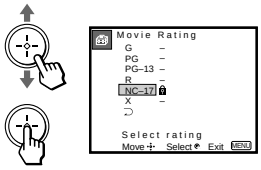


13 Move the joystick up or down to select the movie rating to be blocked, and press ⊕.



14 Move the joystick up or down to select "🔒," and press ⊕.

The 🔒 indicator automatically appears beside the selected rating and all "higher" ratings, indicating that the programs that match the ratings will be blocked.



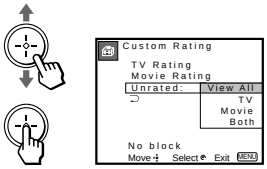
15 Press MENU to exit the menu.

To block TV programs and/or movies for which a rating signal is not given (NR and N/A)

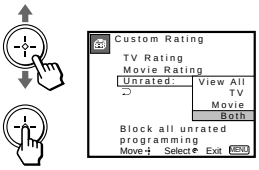
For a description of the NR and N/A ratings, see page 48.

1 Perform steps 1–4 of "Selecting a Custom Rating in U.S.A." on page 42.

2 Move the joystick up or down to select "Unrated," and press ⊕.



3 Move the joystick up or down to select the type of programs to be blocked, and press ⊕.



To block ...	*Select ...*
No program (to view any unrated TV program and movie)	View All
Unrated TV programs	TV
Unrated movies	Movie
Unrated TV programs and movies	Both

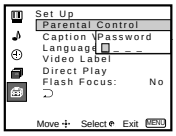
4 Press MENU to exit the menu.

Selecting a Custom Rating in Canada

If you want to select the ratings to be blocked from "Custom" once you have activated the Parental Control feature (page 41), follow the procedure below.

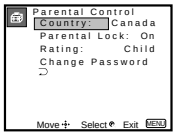
For a detailed description of each rating, see "What the Ratings Mean" on pages 49 and 50.

1 Select "Parental Control" from the Set Up menu. (see page 38)

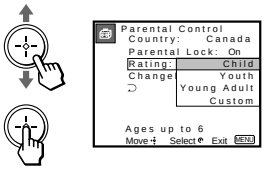


2 Enter your four digit password using the 0–9 buttons.

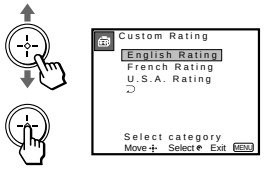
The Parental Control menu appears. Make sure that "Country" is set to "Canada."



3 Move the joystick up or down to select "Rating," and press ⊕.



4 Move the joystick up or down to select "Custom," and press ⊕.

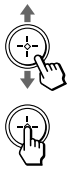


(continued)

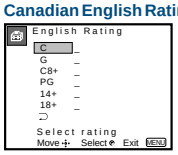
Adjusting Your SET UP (menus) (continued)

5 Move the joystick up or down to select the rating you want to block, and press ⊕.

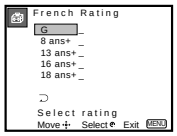
The selected rating appears.



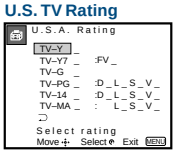
Canadian English Rating



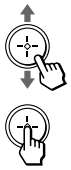
Canadian French Rating



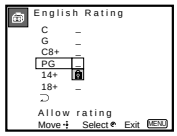
U.S. TV Rating



6 Move the joystick up or down to select the TV rating to be blocked, and press ⊕.

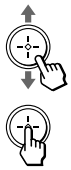


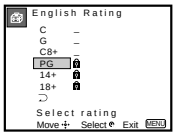
Example: Canadian English Rating



7 Move the joystick up or down to select "🔒," and press ⊕.

The 🔒 indicator automatically appears beside the selected rating and all "higher" ratings, indicating that the programs that match the ratings will be blocked.





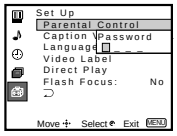
Some U.S. TV ratings have additional content ratings called "extenders," such as D, FV, L, S and V. By setting the extenders, see steps 7 to 10 of "Selecting a Custom Rating in U.S.A." on pages 43 and 44. For more details of extenders, see page 49.

All of the extenders included in the selected ratings will be blocked. If you wish to allow any of them to be viewed, go to step 8.

8 Press MENU to exit the menu.

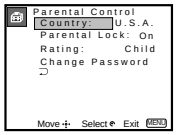
Changing the Password

1 Select "Parental Control" from the Set Up menu. (see page 38)

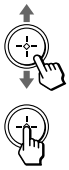


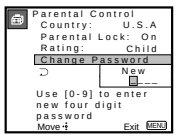
2 Enter your four digit password using the 0–9 buttons.

The Parental Control menu appears.

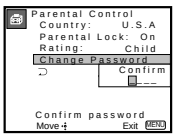


3 Move the joystick up or down to select "Change Password," and press ⊕.





4 Enter a new four digit password using the 0–9 buttons.



5 Enter the password set in step 4 again to confirm.

If you entered it incorrectly, "Password incorrect" appears.

Re-enter the correct password.

6 Press MENU to exit the menu.

If you have forgotten your password

In step 2 of "Changing the Password" on page 46, enter the master password "4357" (corresponding to "HELP" on a phone number pad). You can then store a new password.

Notes:

- If you entered "4357" as your password the first time, you cannot store a new password. (see step 2 of "Activating the Parental Control Feature" on page 40)
- When you select a Parental Control program and the 🔒 indicator is displayed on the screen, you cannot view that program even if you enter "4357." (see "To unlock the Parental Control feature temporarily" on page 42)

What the Ratings Mean

Ratings in U.S.A.

Sony's predetermined ratings

These are original ratings that Sony predetermined according to the viewer's age. Each rating allows you to view the certain programs, as follows.

See pages 48 and 49 for a description of each rating.

Child: Suitable for children under the age of 6.
Viewable U.S. movie ratings: G, NR, and N/A
Viewable U.S. TV ratings: TV-Y, TV-G, and TV-NR

Youth: Suitable for children aged 7 and older.
Viewable U.S. movie ratings: G, PG, NR, and N/A
Viewable U.S. TV ratings: TV-Y, TV-Y7, TV-G, TV-PG, and TV-NR

Young Adult: Suitable for children aged 13 and older.
Viewable U.S. movie ratings: G, PG, PG-13, NR, and N/A
Viewable U.S. TV ratings: TV-Y, TV-Y7, TV-G, TV-PG, TV-14, and TV-NR

(continued)

Adjusting Your SET UP (menus) (continued)

U.S. movie ratings

U.S. movie ratings are for movies (including those shown on TV) rated according to the Motion Picture Association of America (MPAA) Guidelines.

G (General Audiences—All Ages Admitted): In G-rated films no strong words are used, the violence is at a minimum, nudity and sex scenes are not present, nor is there any drug use.

PG (Parental Guidance Suggested. Some Material May Not Be Suitable For Children): This is a film which may need to be monitored first by parents.

PG-13 (Parents Strongly Cautioned. Some Material May Be Inappropriate For Children Under 13): Parents are alerted to be very careful about the attendance of their under-teenage children when viewing.

R (Restricted, Under 17 Require Accompanying Parent Or Adult Guardian): This film includes hard language, tough violence, nudity, drug abuse or other elements of concern.

NC-17 or X (No One 17 Or Under Admitted.): This is a film that most parents would consider not suitable for children aged 17 and under. There may be violence, sex, abberrational behavior, drug abuse or other elements of concern.

NR (Not Rated): This is a film that a producer has not rated, intending to have his film widely released.

N/A (Not Applicable): This is a film that a producer considers outside the scope of the MPAA ratings.

Note:

- NR and N/A ratings are shown together as "Unrated" in the menu.

U.S. TV ratings

U.S. TV ratings are for TV programs rated according to the U.S. Television Parental Guidelines.

TV-Y (All Children): This program is designed for young children aged 2–6 and is appropriate for all children.

TV-Y7 (Directed to Older Children): This program is designed for children aged 7 and above. Themes and elements in this program may include mild fantasy violence or slapstick violence, or may frighten children under the age of 7.

TV-G (General Audience): Most parents would find this program suitable for all ages. It contains little or no violence, no strong language and little or no sexual dialog or situations.

TV-PG (Parental Guidance Suggested): This program contains some material that parents may find unsuitable for younger children.

TV-14 (Parents Strongly Cautioned): This program contains some material that many parents would find unsuitable for children under the age of 14.

TV-MA (Mature Audience Only): This program is specifically designed to be viewed by adults and therefore may be unsuitable for children under the age of 17.

TV-NR (Not Rated/Unrated): This is a program broadcast without any rating, such as news, news flashes or sports.

Note:

The TV-NR rating is shown as "Unrated" in the menu.

About the extenders of U.S. TV ratings

TV-Y7, TV-PG, TV-14 and TV-MA ratings have additional content ratings called "extenders" to define additional viewing limits. The extenders are defined as follows:

D (sexually suggestive Dialog): Programs containing suggestive dialog, or sexual innuendo

FV (Fantasy Violence): Programs containing cartoon violence occurring in TV-Y7 programs only

L (coarse Language): Programs containing coarse language

S (Sexual situations): Programs containing sexual content

V (Violence): Programs containing violence There may be some profanity, violence or brief nudity in these programs.

Ratings in Canada

Sony's predetermined ratings

These are original ratings that Sony predetermined according to the viewer's age. Each rating allows you to view the certain programs, as follows.

See the right column to page 50 for a description of each rating.

Child: Suitable for children under the age of 7.
Viewable Canadian English Language ratings: C and G
Viewable Canadian French Language ratings: G
Viewable U.S. TV ratings: TV-Y, TV-G, and TV-NR

Youth: Suitable for children aged 8 and older.
Viewable Canadian English Language ratings: C, G, C8+ and PG
Viewable Canadian French Language ratings: G and 8 ans+
Viewable U.S. TV ratings: TV-Y, TV-Y7, TV-G, TV-PG, and TV-NR

Young Adult: Suitable for children aged 14 and older.
Viewable Canadian English Language ratings: C, G, C8+, PG and 14+
Viewable Canadian French Language ratings: G, 8 ans+, 13 ans+
Viewable U.S. TV ratings: TV-Y, TV-Y7, TV-G, TV-PG, TV-14, and TV-NR

Canadian English Language ratings

The Canadian English Language Ratings are for TV programs in English broadcast in Canada.

C (Programming intended for children under age 8): There will be no realistic scenes of violence or no offensive language, nudity or sexual content. Careful attention is paid to themes, which could threaten children's sense of security and well-being.

G (General Audience): Will contain very little violence, either physical or verbal or emotional. There may by some inoffensive slang, no profanity and no nudity.

(continued)

Adjusting Your SET UP (menus) (continued)

C8+ (Programming generally considered acceptable for children 8 years and over to watch on their own): Violence will not be portrayed as the preferred, acceptable, or only way to resolve conflict; or encourage children to imitate dangerous acts which they may see on television. There will be no profanity, nudity or sexual content.

PG (Parental Guidance): Programming intended for a general audience but which may not be suitable for younger children. Parents may consider some content inappropriate for unsupervised viewing by children aged 8 - 13.

14+ (Programming contains themes or content which may not be suitable for viewers under the age of 14): Parents are strongly cautioned to exercise discretion in permitting viewing by pre-teens and early teens.

18+ (Adult): May contain violence integral to the development of the plot, character or theme, intended for adult audiences. May contain graphic language and explicit portrayals of nudity and/or sex.

E (Exempt): Exempt programming includes: news, sports documentaries and other information programming: talk shows, music videos, and variety programming.

Note:

The E (Exempt) rating is not shown in the menu.

Canadian French Language ratings

The Canadian French Language Ratings are for TV programs in French broadcast in Canada.

G (General): Programming intended for audience of all ages. Contains no violence, or the violence it contains is minimal or is depicted appropriately with humor or caricature or in an unrealistic manner.

8 ans+ (8+ General - Not recommended for young children): Programming intended for a broad audience but contains light or occasional violence that could disturb young children. Viewing with an adult is recommended for young children (under the age of 8).

13 ans+ (Programming may not suitable for children under the age of 13): Viewing with an adult is strongly recommended for children under 13.

16 ans+ (Programming is not suitable for children under the age of 16): Contains frequent scenes of violence or intense violence.

18 ans+ (Programming restricted to adults): Contains constant violence or scenes of extreme violence.

E (Exempt): Exempt programming.

Note:

The E (Exempt) rating is not shown in the menu.

Operating Video Equipment

Setting the Manufacturer's Code

You can use the supplied remote control to operate Sony or non-Sony video equipment that has an infrared sensor.

1 Set the VTR 1/2/3/DVD/MDP switch to the input through which you would like to access your video equipment.

The following Sony equipment is preset to each input as shown below:

VTR1 (303)	Beta, ED Beta VCRs
VTR2 (302)	8 mm VCR
VTR3 (301)	VHS VCR
DVD/MDP (751)	DVD Player

2 Press CODE SET, DVD/VTR (FUNCTION), and the 0-9 buttons to enter the manufacturer's code number (see the following chart), then press ENTER.

For example, to operate a Sony 8mm VCR:

If the remote control doesn't work

- See the tips on page 53.

VCR manufacturer code numbers

Manufacturer	*Code*
Sony	301, 302, 303
Aiwa	338
Admiral (M. Ward)	327
Audio Dynamic	314, 337
Bell & Howell (M. Ward)	330
Broksonic	319, 317
Canon	309, 308
Citizen	332
Craig	302, 332
Curtis Mathis	304, 338, 309
Daewoo	341, 312, 309
DBX	314, 336, 337
Dimensia	304
Emerson	319, 320, 316, 317, 318, 341
Fisher	330, 335
Funai	338
General Electric	329, 304, 309
Go Video	340, 339, 322
Goldstar	332
Hitachi	306, 304, 305, 338
Instant Replay	309, 308
JC Penney	309, 305, 304, 330, 314, 336, 337
JVC	314, 336, 337
Kenwood	314, 336, 332, 337
LXI (Sears)	332, 305, 330, 335, 338
Magnavox	308, 309, 310
Marantz	314, 336, 337
Marta	332
Memorex	309, 335
Minolta	305, 304
Mitsubishi/MGA	323, 324, 325, 326
Multitech	325, 338, 321
NEC	314, 336, 337
Olympic	309, 308
Optimus	327
Panasonic	308, 309, 306, 307
Pentax	305, 304
Philco	308, 309
Philips	308, 309, 310
Pioneer	308
Quasar	308, 309, 306
RCA/PROSCAN	304, 305, 308, 309, 311, 329, 312, 313, 310
Realistic	309, 330, 328, 335, 324, 338
Sansui	314
Samsung	322, 313, 321
Sanyo	330, 335
Scott	312, 313, 321, 335, 323, 324, 325, 326
Sharp	327, 328
Signature 2000 (M. Ward)	338, 327
Sylvania	308, 309, 338, 310
Symphonic	338
SV2000	338
Tashiro	332
Tatung	314, 336, 337
Teac	314, 336, 338, 337
Technics	309, 308
Teknica	338
Toshiba	312, 311
Wards	327, 328, 335, 331, 332
Yamaha	330, 314, 336, 337
Zenith	331

MDP manufacturer code numbers

Manufacturer	*Code*
Sony	701
Panasonic	704, 710
Mitsubishi	702

Operating Video Equipment (continued)

DVD Player manufacturer code numbers

Manufacturer	Code
Sony	751
Panasonic	753
Pioneer	752
RCA	755
Toshiba	754

Tips

- *In some rare cases, you may not be able to operate your non-Sony video equipment with the supplied remote control. In this case, please use the equipment's own remote control.*
- *When you remove the batteries, the code number may revert to the factory setting.*

To operate video equipment

1. Set the VTR1/2/3/DVD/MDP switch to the input through which you would like to access your video equipment.
2. Press DVD/VTR (FUNCTION).
3. Use the VCR/DVD/MDP operation buttons indicated in the following tables.

Operating a VCR using the remote control

To turn On/Off	Press DVD/VTR (POWER). [Green Button]
To select a channel	Press the 0 – 9 buttons.
To change channels	Press CH +/–.
To record	Press ⏺ while pressing ▭ (REC) (upper).
To play	Press ►.
To stop	Press ■.
To fast forward	Press ►►.
To rewind the tape	Press ◄◄.
To pause	Press ❚❚. Press again to resume normal playback.
To search the picture forward or backward	Press ►► or ◄◄ during playback. Release to resume normal playback.
To change input mode	Press TV/VTR.

Operating an MDP using the remote control

To turn On/Off	Press DVD/VTR (POWER). [Green Button]
To play	Press ►.
To stop	Press ■.
To pause	Press ❚❚. Press again to resume normal playback.
To search the picture forward or backward	Press ►► or ◄◄ during playback. Release to resume normal playback.
To search a chapter forward or backward	Press CH +/–.

Operating a DVD Player using the remote control

To turn On/Off	Press DVD/VTR (POWER). [Green Button]
To play	Press ►.
To stop	Press ■.
To pause	Press ❚❚. Press again to resume normal playback.
To step through different tracks of an audio disc	Press ►► to step forward or ◄◄ to step backward.
To step through different chapters of a video disc	Press CH + to step forward or CH – to step backward.
To display the Title menu	Press TITLE.
To select DVD multilingual sound	Press AUDIO repeatedly. [Pink Labeled Button]
To display the DVD menu	Press DVD MENU.
To select tracks directly	Press 0-9 buttons.
To display the menu (Set up)	Press MENU.

Operating a Cable Box or Satellite Receiver (SAT)

Setting the Manufacturer's Code

You can program the supplied remote control to operate a cable box or satellite receiver.

Press CODE SET, SAT/CABLE (FUNCTION), and the 0-9 buttons to enter the manufacturer's code number (see the following chart), then press ENTER.

For example, to operate a Sony satellite receiver:

Manufacturer code numbers (cable box)

Manufacturer	Code
Hamlin/Regal	222, 223, 224, 225, 226
Jerrold/G. I.	201, 202, 203, 204, 205, 222, 206, 207, 208, 218
Oak	227, 228, 229
Panasonic	219, 220, 221
Pioneer	214, 215
Scientific Atlanta	209, 210, 211
Tocom	216, 217
Zenith	212, 213

Manufacturer code numbers (satellite receiver)

Manufacturer	Code number
Sony	801 (preset code for remote control)
Geneal Electric	802, 808
Hitachi	805
Hughes	804
Panasonic	803
RCA/PROSCAN	802
Toshiba	806, 807

To operate the cable box or satellite receiver (SAT)

1. Press SAT/CABLE (POWER) [Green Button] to turn on/off the cable box or satellite receiver.
2. Press SAT/CABLE (FUNCTION).
3. For other operations, refer to the operating instructions that come with the equipment.
   The GUIDE and INDEX (blue-labeled) buttons can be used only with a satellite receiver.

If the remote control doesn't work

- Try repeating the set up procedures using the other codes listed for your equipment.

To operate the projection TV

Press TV (FUNCTION). Then use the projection TV control buttons to control the projection TV.

Tips

- *If more than one code number is listed, try entering them one by one until you come to the correct code for your equipment.*
- *If you enter a new code number, the code number you previously entered at that setting is erased.*
- *In some rare cases, you may not be able to operate your equipment with the supplied remote control. In this case, use the equipment's own remote control unit.*
- *Whenever you remove the batteries — to replace them, for example — if too much time is taken, the code numbers may revert to the factory setting and must be reset.*

Troubleshooting

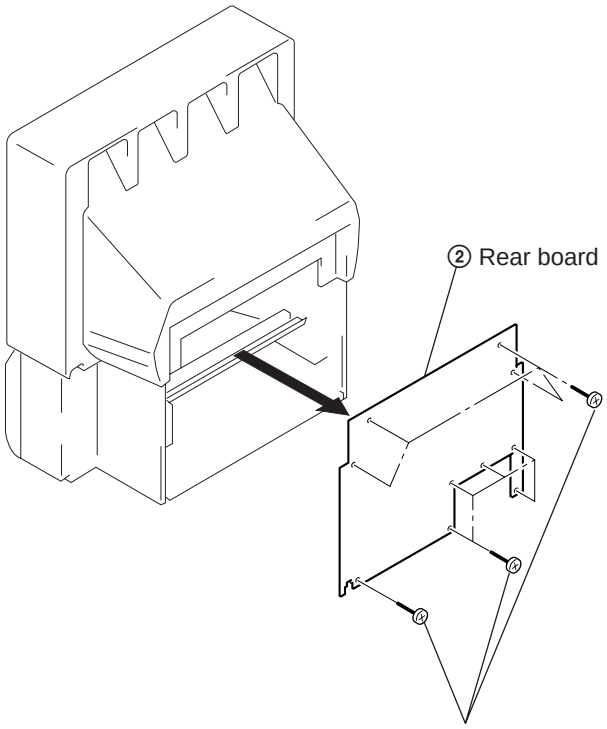
If, after reading the following instructions, you have additional questions related to the use of your Sony projection TV, please call one of the following numbers (English only).
Customers in the continental United States contact the Direct Response Center at: 1-800-222-SONY (7669)
Customers in Canada contact the Customer Relations Center at: (416) 499-SONY (7669)

The picture turns off and the TIMER/STAND BY indicator on the front panel flashes (self-diagnosis function)	• The projection TV is equipped with a self-diagnosis function. If there is a problem with your projection TV, the TIMER/STAND BY indicator on the front panel will flash repeatedly. Counting the number of flashes helps you inform qualified Sony personnel of the projection TV's condition. • Press POWER on the projection TV to turn it off, then inform qualified Sony personnel or the above Direct Response Center of the number of flashes.
No picture (screen not lit), no sound	• Make sure the power cord is plugged in. • Operate with the buttons on both the projection TV and the remote control. • Check to see if the TV/VIDEO setting is correct: when watching TV, set to TV, and when watching video tapes, set to VIDEO 1, 2, 3, 4 or 5. • Try another channel. *It could be station trouble.* • Perform AUTO SET UP again using the SET UP button to return to the factory preset condition. (see "To perform AUTO SET UP again" on page 20) • The Parental Control feature is activated. (see "To deactivate the Parental Control feature" on page 41)
Remote control does not operate	• Batteries could be weak. Replace the batteries. • Press TV (FUNCTION) when operating your projection TV. • Make sure the projection TV's power cord is connected securely to the wall outlet. • Locate the projection TV at least 3-4 feet away from fluorescent lights. • Check the S-Link connection. (see "Using the S-Link Function" on page 16) • Check the polarity of the batteries.
Dark, poor or no picture (screen lit), good sound	• Adjust "Picture" in the Video menu. (see "Picture Adjustment" on page 30) • Adjust "Brightness" in the Video menu. (see "Picture Adjustment" on page 30) • Check antenna/cable connections. • Perform AUTO SET UP again using the SET UP button to return to the factory preset condition. (see "To perform AUTO SET UP again" on page 20) • Adjust the convergence again using the FLASH FOCUS button. (see "Adjusting the Convergence Automatically (FLASH FOCUS)" on page 20)
Good picture, no sound	• Press MUTING so that "Muting" disappears from the screen. (see "MUTING" on page 21) • Check the "MTS/SAP" setting in the Audio menu. (see "MTS/SAP" on page 31) • Make sure "Speaker" is set to "On" in the Audio menu. (see "Speaker" on page 32) • Perform AUTO SET UP again using the SET UP button to return to the factory preset condition. (see "To perform AUTO SET UP again" on page 20)

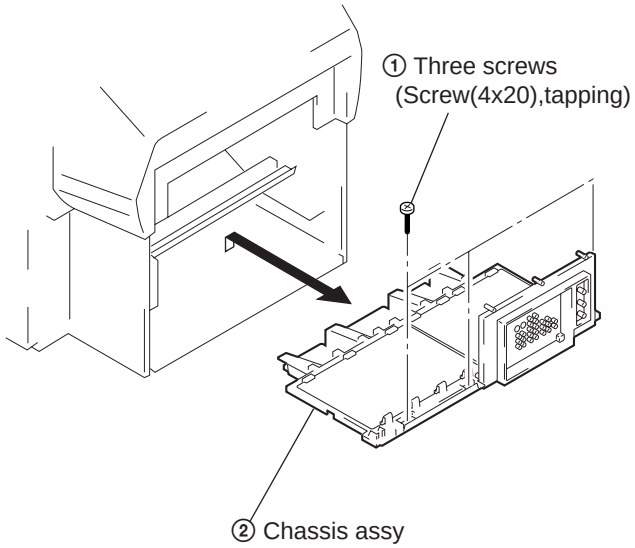
Cannot receive upper channels (UHF) when using an antenna	• Make sure "Cable" is "Off" in the Channel Set Up menu. (see "Cable" on page 35) • Use "Auto Program" to add receivable channels that are not presently in the TV's memory. (see "Auto Program" on page 35)
No color	• Adjust "Color" in the Video menu. (see "Picture Adjustment" on page 30) • Black and white programs cannot be seen in color. • Perform AUTO SET UP again using the SET UP button to return to the factory preset condition. (see "To perform AUTO SET UP again" on page 20)
Only snow and noise appear on the screen	• Check the "Cable" setting in the Channel Set Up menu. (see "Cable" on page 35) • Check the antenna/cable connections. • Make sure the channel is broadcasting programs. • Press ANT to change the input mode. (see "ANT" on page 23)
Dotted lines or stripes	• Adjust the antenna. • Keep the projection TV away from noise sources such as cars, neon signs or hair-dryers.
TV is fixed to one channel	• Use "Auto Program" to add receivable channels that are not presently in TV's memory. (see "Auto Program" on page 35)
Double images or ghosts	• Use a highly directional outdoor antenna or a cable (when the problem is caused by reflections from nearby mountains or tall buildings).
Cannot operate the menu	• If the item you want to choose appears in gray, you cannot select it. • Press the projection TV's power button off and on again.
Cannot receive any channels when using cable TV	• Make sure "Cable" is "On" in the Channel Set Up menu. (see "Cable" on page 35) • Use "Auto Program" to add receivable channels that are not presently in the TV's memory. (see "Auto Program" on page 35)
Cannot gain enough volume when using a cable box	• Increase the volume at the cable box. Then press TV (FUNCTION) and adjust the projection TV's volume.
Projection TV malfunctions when using the S-Link function	• Make sure the projection TV's power cord is connected securely to the wall outlet. • Check the S-Link connection. (see "Using the S-Link Function" on page 16)
CHANNEL INDEX does not display all available channels	• Make sure "Cable" is "On" in the Channel Set Up menu. (see "Cable" on page 35) • Use "Auto Program" to add receivable channels that are not presently in the TV's memory. (see "Auto Program" on page 35)
Favorite Channel does not display your choices	• Verify that "Favorite Channel" is set to "Manual" in the Channel Set Up menu. (see "Setting Favorite Channel manually" on page 36)
Some video sources do not appear when you press TV/VIDEO	• Ensure that "Video Label" is not set to "Skip." (see "Video Label" on page 39)
Recording through MONITOR OUT does not function properly when recording in PIP or P&P mode	• MONITOR OUT will not record both images in PIP or P&P. Only the main picture will be recorded. • If you are recording the main picture and you switch to the sound of the sub picture using the AUDIO button, the main picture will be recorded with sound from the other program.
Cannot play shooting games	• Some shooting games which involve pointing a light beam at the TV screen with an electronic gun or rifle cannot be used with this projection TV. For details, see the instruction manual supplied with the video game software.

SECTION 2
DISASSEMBLY

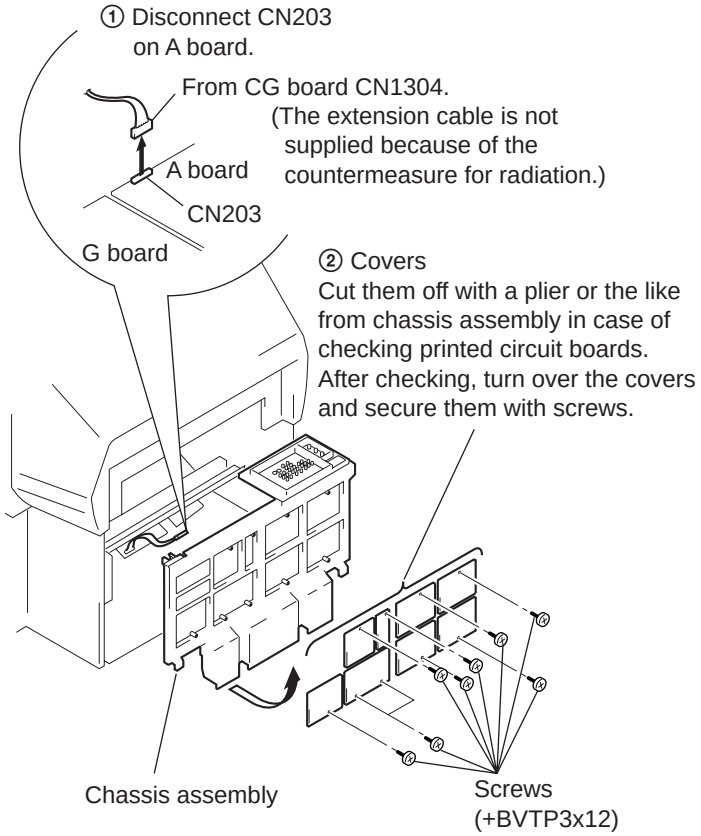
2-1. REAR BOARD REMOVAL



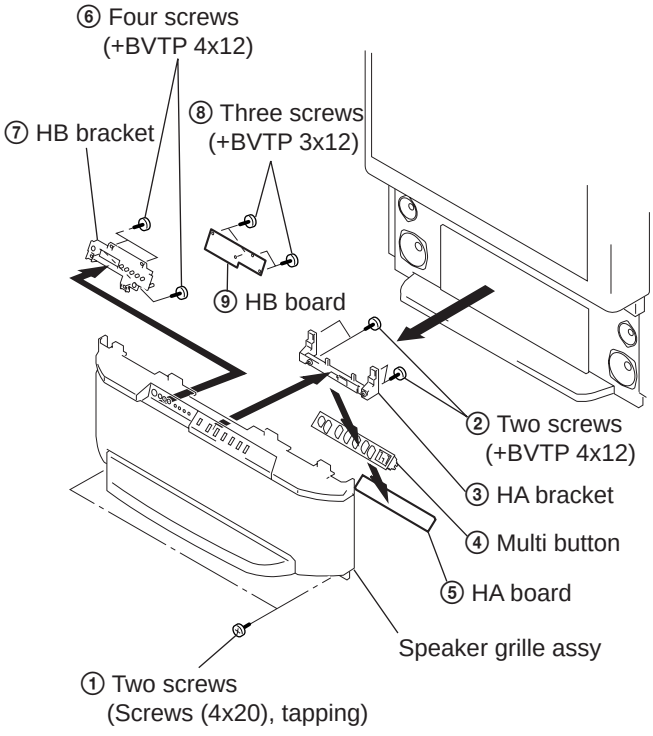
2-2. CHASSIS ASSY REMOVAL



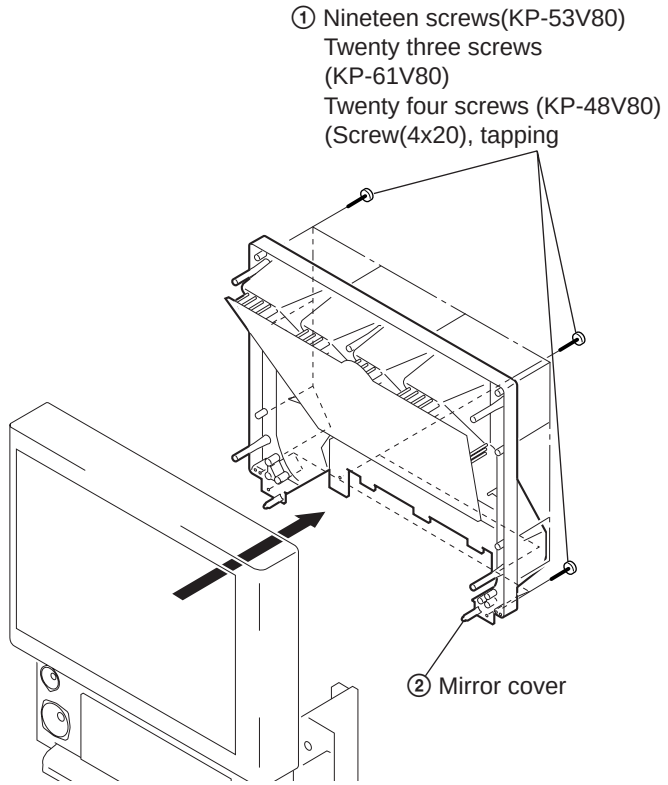
2-3. SERVICE POSITION



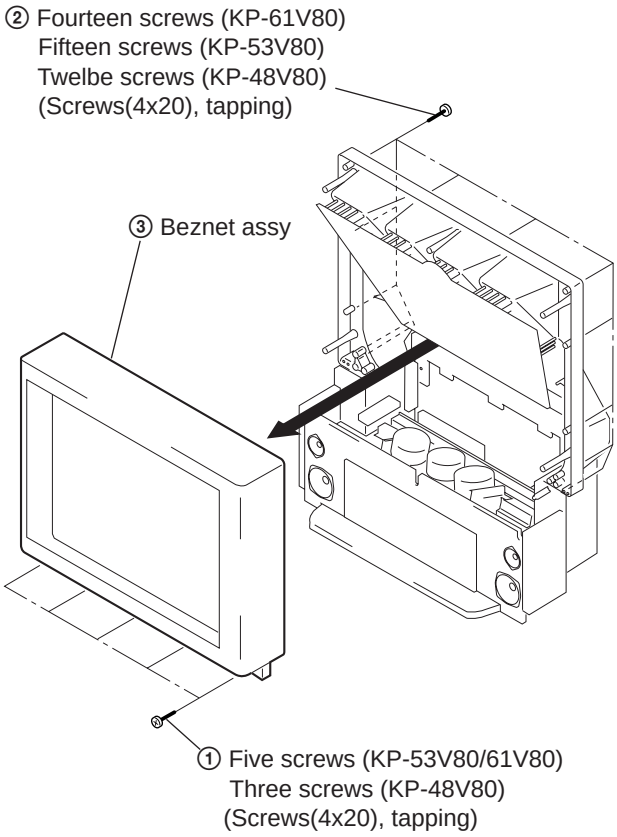
2-4. HA BOARD AND HB BOARD REMOVAL



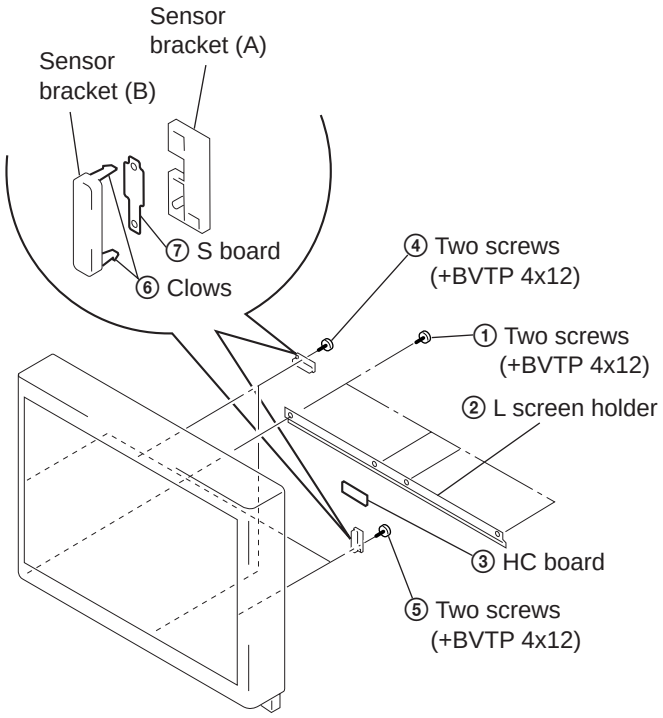
2-5. MIRROR COVER REMOVAL



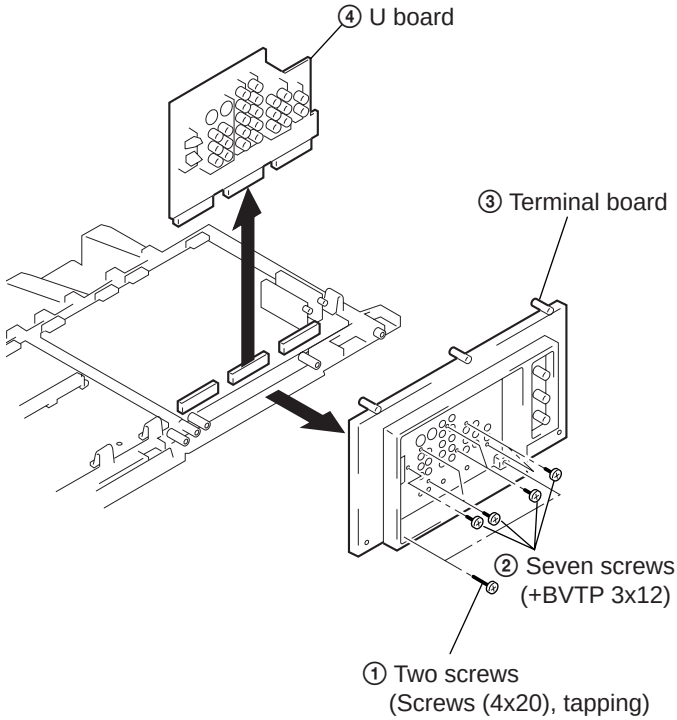
2-6. BEZNET ASSY REMOVAL



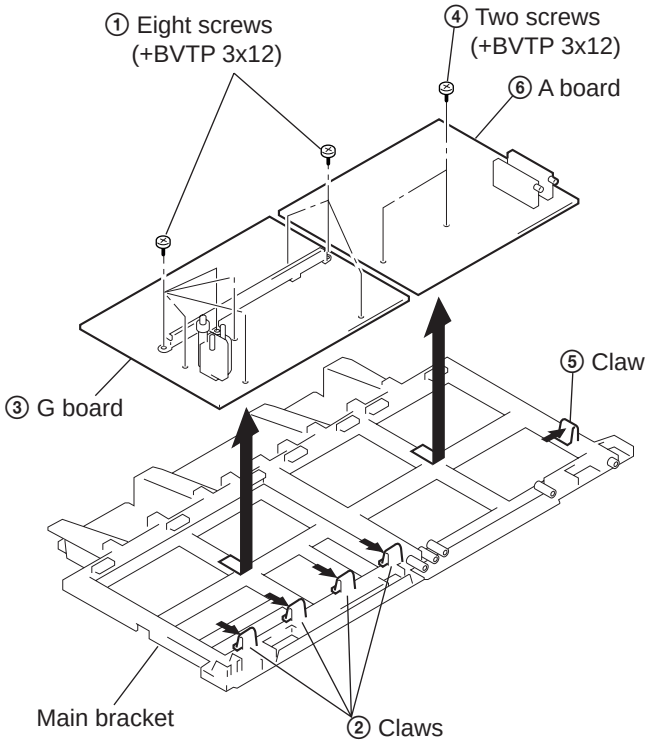
2-7. HC BOARD AND S BOARD REMOVAL



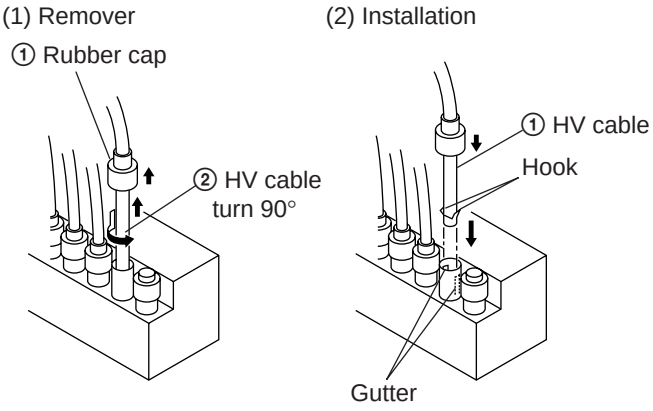
2-8. U BOARD AND TERMINAL BOARD REMOVAL



2-9. A BOARD AND G BOARD REMOVAL

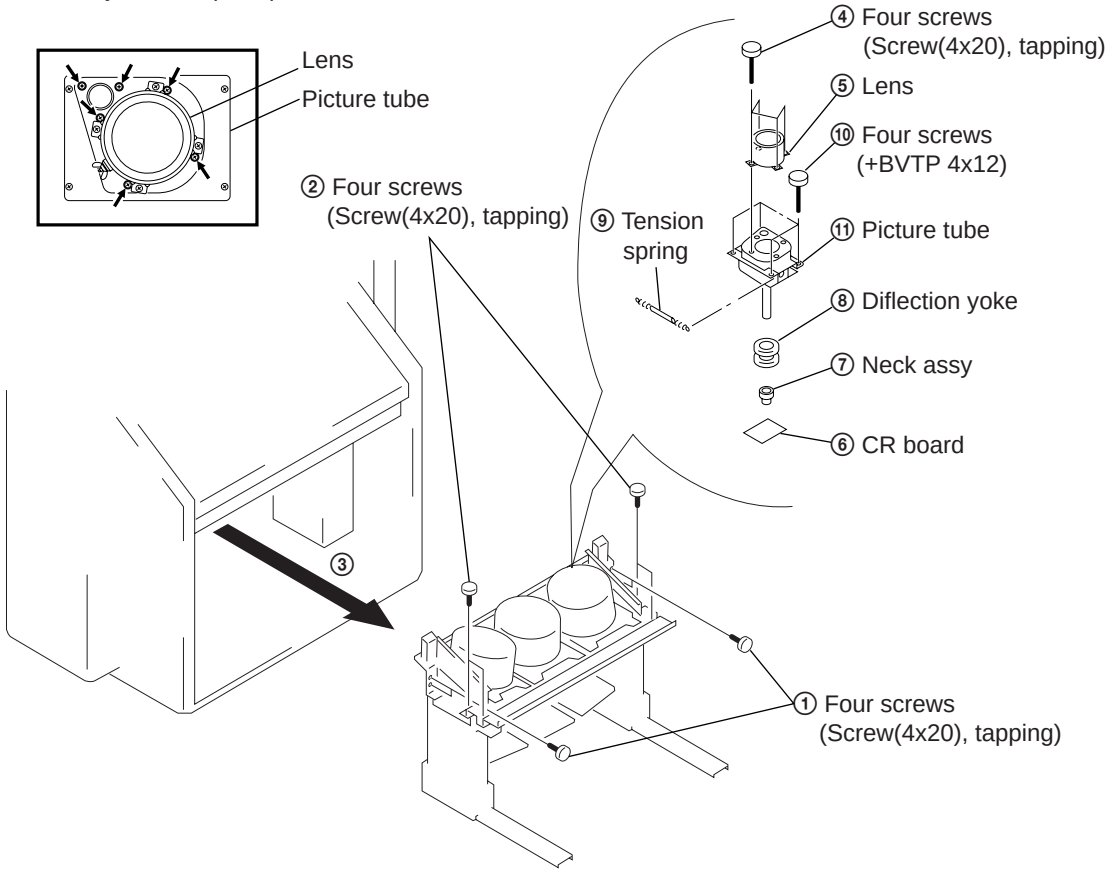


2-11. HIGH-VOLTAGE CABLE INSTALLATION AND REMOVAL



2-10. PICTURE TUBE REMOVAL

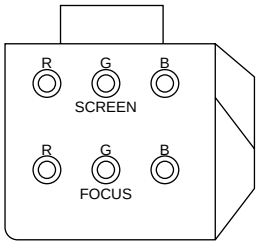
CAUTION: Removing the arrow-marked screws is strictly prohibited.
If removed, it may cause liquid spill.



SECTION 3
SET-UP ADJUSTMENTS

3-1. SCREEN VOLTAGE ADJUSTMENT (ROUGH ALIGNMENT)

1. Receive the Monoscope signal.
2. Set 50% BRIGHTNESS and minimum PICTURE.
3. Turn the red VR on the FOCUS block all the way to the left and then gradually turn it to the right until the point where you can see the retrace line.
4. Next gradually turn it to the left to the position where the retrace line disappears.



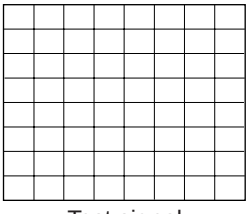
FOCUS block

Fig. 3-1

3-2. FOCUS LENS ADJUSTMENT

In this adjustment, use the remote commander in the service mode.
For details of the usage of the service mode and the remote commander, please refer the item 3-9. ELECTRICAL ADJUSTMENT BY REMOTE COMMANDER.

1. Loosen the lens screw.
2. Set to the service mode.
3. Change TV mode to the video input mode.
4. Set to PJE, and press 6 to display the test signal (crosshatch)“ on the screen.
5. Set VPNT 28 RON to “000”, 29 GON to “001” and 30 BON to “000” to show only the green color.
6. Turn the green lens to adjust to the optimum focus point with the test signal.
7. Tighten the lens screw.
8. Set VPNT 28 RON to “001”, 29 GON to “000” and 30 BON to “000” to show only the red color.
9. Adjust red CRT lens just the same as green.



Test signal

Fig. 3-2

10. Set VPNT 28 RON to “000”, 29 GON to “000” and 30 BON to “001” to show only the blue color.
11. Adjust blue CRT lens just the same as green.

*: Every time you press 6, the test signal changes to “crosshatch+video signal” - “dots+video signal” - “crosshach(black)” - “dots(black)” - off.

3-3. SCREEN (G2) ADJUSTMENT

1. Select VIDEO1 mode without signals.
2. Connect an oscilloscope to the TP701(KR), TP732(KG) and TP761(KB) of CR board, CG board and CB board.
3. Adjust R, G and B screen voltage to 170 – 173V with screen VR on the Focus block.

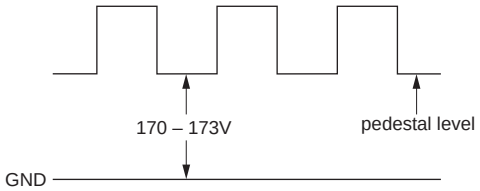
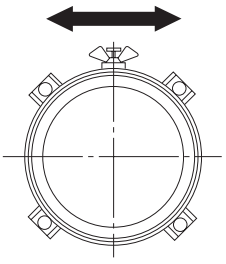


Fig. 3-3

3-4. FOCUS VR ADJUSTMENT

1. Set to the service mode.
2. Change TV mode to the video input mode.
3. Set to PJE, and press 6 to display the test signal (crosshatch) on the screen.
4. Set VPNT 28 RON to “000”, 29 GON to “001” and 30 BON to “000” to show only the green color.
5. Turn the green VR on the focus block to adjust to the optimum focus point with the test signal.
6. Set VPNT 28 RON to “001”, 29 GON to “000” and 30 BON to “000” to show the red color.
7. Turn the red VR on the focus block to adjust to the optimum focus point with the test signal.
8. Set VPNT 28 RON to “000”, 29 GON to “000” and 30 BON to “001” to show the blue color.
9. Turn the blue VR on the focus block to adjust to the optimum focus point with the test signal.



Lens

Fig. 3-4

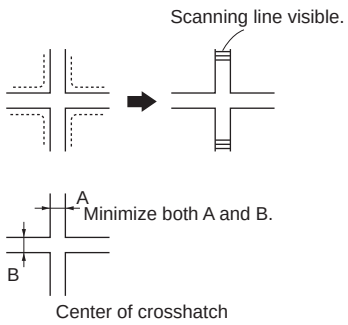


Fig. 3-5

3-5. DEFLECTION YOKE TILT ADJUSTMENT

1. Receive the Monoscope signal.
2. Set in service mode.
3. Set VPNT 29 GON to “001” 28 RON to “000” and 30 BON to “000” to show only the green color.
4. Loosen the deflection yoke set screw and align the tilt of the Deflection Yoke so that the bars at the center of the monoscope pattern are horizontal.
5. After aligning the deflection yoke, fasten it securely to the funnel-shaped portion (neck) of the CRT.
6. The tilt of the deflection yoke for red is aligned in the mode VPNT 28 RON “001”, 29 GON “000”, 30 BON “000” on the service mode menu, and the tilt of the deflection yoke for biue is aligned with in the mode VPNT 28 RON “000”, 29 GON “000”, 30 BON “001” on the service menu, is aligned the same as was done for green.

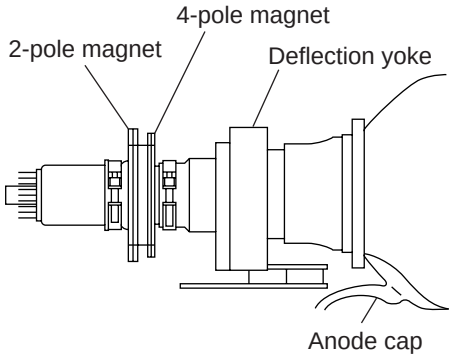


Fig. 3-6

3-6. 2-POLE MAGNET ADJUSTMENT (GREEN,RED)

1. Receive the Dot signal.
2. Set in service mode.
3. Set VPNT 29 GON to “001” 28 RON to “000” and 30 BON to “000” to show only the green color.
4. Turn the green VR on the focus block to the right and set to overfocus to enlarge the spot.
5. Now align the 2-Pole Magnet so that the enlarged spot is in the center of the Just Focus spot.
6. Align the green focus VR and set for just (precise) focus.
7. Perform the same alignment for red.

Use the center dot

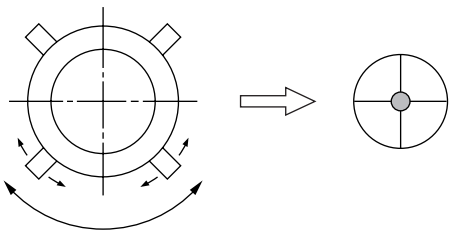


Fig. 3-7

3-7. 4-POLE MAGNET ADJUSTMENT

1. Receive the Dot signal.
2. Set in service mode.
3. Set VPNT 29 GON to “001” 28 RON to “000” and 30 BON to “000” to show only the green color.
4. Turn the green VR on the focus block to the left and set to underfocus to enlarge the spot.
5. Now align the 4-Pole Magnet so that the enlarged spot becomes a perfect circle for green and red.
6. Perform the same alignment for blue.

Use the center dot

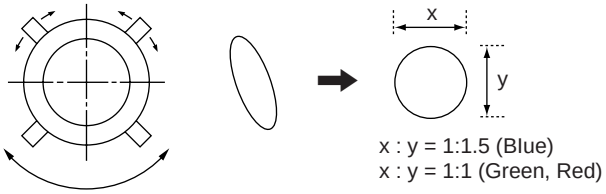


Fig. 3-8

3-8. DEFOCUS ADJUSTMENT (BLUE)

1. Select the video menu and set the mode to “Vivid” mode.
2. Set to the service mode.
3. Change TV mode to the video input mode.
4. Set to PJE, and press 6 to display the test signal (dots) on the screen.
5. Turn the blue VR on the focus block to adjust to the diameter of the dots as shown in the figure below.

[Focus adjustment point]

Inch	48"	53"	61"
L	7	8	9

Fig. 3-9

3-9. ELECTRICAL ADJUSTMENT BY REMOTE COMMANDER

By using Remote Commander (RM-Y905),all circuit adjustments can be made.

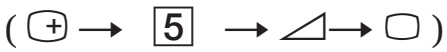
NOTE : Test Equipment Required.

1. Pattern Generator
2. Frequency counter
3. Digital multimeter
4. Audio oscillator

1. METHOD OF SETTING THE SERVICE ADJUSTMENT MODE

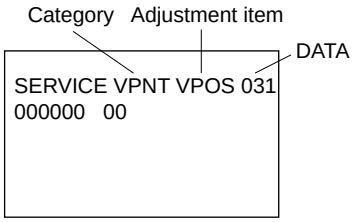
SERVICE MODE PROCEDURE

1. Standby mode. (Power off)
2. DISPLAY → 5 → VOL (+) → TV POWER



on the Remote Commander.
(Press each button within a second.)

SERVICE MODE ADJUSTMENT



(SCREEN DISPLAY)

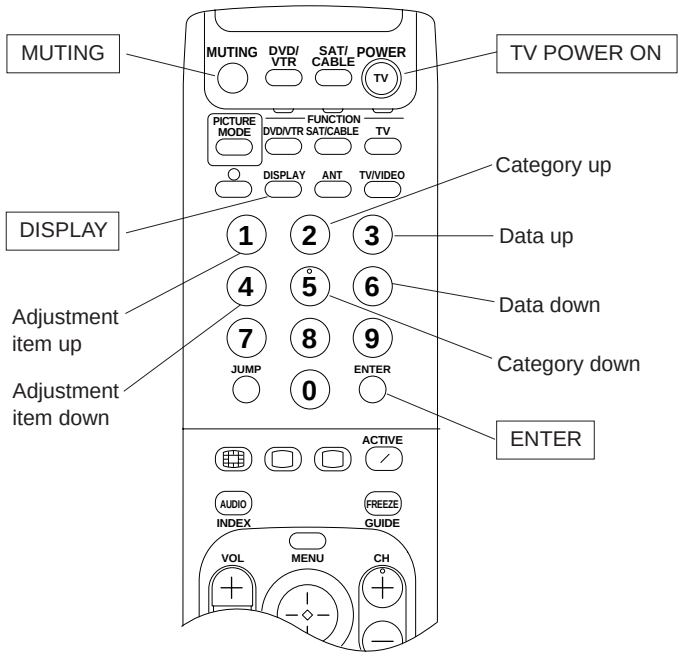
3. The SCREEN displays the item being adjusted.
4. Press 1 or 4 on the Remote Commander to select the adjustment item.
5. Press 3 or 6 on the Remote Commander to change the data.
6. Press 2 or 5 on the Remote Commander to select the category.
7. If you want to recover the latest values press 0 then ENTER to read the memory.
8. Press MUTING then ENTER to write into memory.
9. Turn power off.

Note: Press 8 then ENTER on the Remote Commander to initialize or turn set off and on to exit.

2. MEMORY WRITE CONFIRMATION METHOD

1. After adjustment, remove the plug from AC outlet, and then replace the plug in AC outlet again.
2. Turn the power switch ON and set to Service Mode.
3. Call the adjusted items again and confirm they were adjusted.

3. ADJUST BUTTONS AND INDICATOR



RM-Y905

Note : In the PJE mode these are different a little. See page 46.

4. SERVICE MODE LIST

: Fixed data

VPNT

ITEM NUMBER	ADJUSTMENT ITEM	DATA RANGE	STANDARD DATA	NOTE
0	VPOS	0-63	31	V POSITION
1	VSIZ	0-63	31	V SIZE
2	VCOM	0-3	0	V COMP
3	VLIN	0-15	7	V LINEARITY
4	VSCO	0-15	7	V SCURVE CORRECTION
5	HPOS	0-15	7	H POSITION
6	HSIZ	0-63	31	H SIZE
7	PAMP	0-63	31	PIN AMP
8	UPIN	0-15	7	UPPER CORNER PIN DISTORTION
9	LPIN	0-15	7	LOWER CORNER PIN DISTORTION
10	PPHA	0-15	5	PIN PHASE
11	AFC	0-3	2	AFC LOOP GAIN
12	VBOW	0-15	7	V BOW
13	VANG	0-15	7	V ANGLE
14	REF	0-3	3	REFERENCE PULSE POSITION
15	RDRV	0-63	31	RED DRIVE GAIN
16	BDRV	0-63	31	BLUE DRIVE GAIN
17	RCUT	0-15	7	RED CUTOFF
18	BCUT	0-15	7	BLUE CUTOFF
19	SCON	0-15	7	SUB CONTRAST
20	SHUE	0-15	7	SUB HUE
21	SCOL	0-15	7	SUB COLOR
22	CDM2	0,1	0	COUNT DOWN MODE2
23	DPIX	0,1	1	DYNAMIC PICTURE
24	NOTC	0,1	0	Y CHROMA TRAP
25	CROM	0-15	7	CHROMA TRAP F0
26	TOT	0,1	0	CHROMA TOT FILTER
27	SHPF	0-3	3	SHARPNESS F0
28	RON	0,1	1	RED ON
29	GON	0,1	1	GREEN ON
30	BON	0,1	1	BLUE ON
31	DCOL	0,1	1	DYNAMIC COLOR
32	CDMD	0,1	0	V COUNT DOWN
33	LBLK	0-15	13	LEFT-SIDE BLANK WIDTH
34	RBLK	0-15	13	RIGHT-SIDE BLANK WIDTH
35	PREC	0-3	1	PRE OVER LEVEL FOR COMP .V IN
36	PREY	0-3	1	PRE OVER LEVEL FOR Y IN

VPNV

ITEM NUMBER	ADJUSTMENT ITEM	DATA RANGE	STANDARD DATA	NOTE
0	SBRV	0-63	27	SUB BRIGHTNESS FOR VIVID
1	GMMV	0-3	2	GAMMA LEVEL FOR VIVID
2	YDCV	0,1	1	Y-DC TRANSFER RATIO FOR VIVID
3	ABLV	0,1	1	ABL MODE FOR VIVID
4	AXIV	0,1	0	AXIS R-Y,G-Y FOR VIVID

VPNS

ITEM NUMBER	ADJUSTMENT ITEM	DATA RANGE	STANDARD DATA	NOTE
0	SBRS	0-63	27	SUB BRIGHTNESS FOR STANDARD
1	GMMS	0-3	2	GAMMA LEVEL FOR STANDARD
2	YDCS	0,1	0	Y-DC TRANSFER RATIO FOR STANDARD
3	ABLS	0,1	1	ABL MODE FOR STANDARD
4	AXIS	0,1	0	AXIS R-Y,G-Y FOR STANDARD

PJED

ITEM NUMBER	ADJUSTMENT ITEM	DATA RANGE	STANDARD DATA	NOTE
0	FDIS	0,1	0	SELECT REGI DATA DISPLAY OF FINE ADJ
1	OSDH	1-255	31	PJED SERVICE MENU H POSITION
2	OSDV	1-255	25	PJED SERVICE MENU V POSITION
3	FVST	0-255	25	LINE NUMBER OF FINE ADJUST START
4	V1ST	0-255	0	V1 START DATA
5	V1CU	0-255	62	V1 COUNT UP DATA
6	COHP	0-255	0	H-PHASE OF ROUGH ADJ
7	FIHP	0-255	194	H-PHASE OF FINE ADJ
8	TPHP	0-255	62	H-PHASE OF TEST PATTERN
9	DFHP	0-255	225	H-PHASE OF DYNAMIC FOCUS
10	DFHG	-128-127	-80	H-2 GAIN OF DYNAMIC FOCUS
11	DFVG	-128-127	-15	V-2 GAIN OF DYNAMIC FOCUS
12	PWM l	0-255	0	PWM l
13	PWM2	0-255	32	H-PHASE OF AUTO REGI .TEST PATTERN
14	HBLD	0-255	244	H-PHASE OF RETURNED BLUE V LINE
15	HBLW	0-63	23	PULSE WIDTH OF RETURNED BLUE V LINE
16	BLKP	0-255	27	START BLANK PULSE
17	COGV	-128-127	X(*1)	GREEN V CENT OFFSET DATA OF AUTO REGI
18	CORV	-128-127	X(*1)	RED V CENT OFFSET DATA OF AUTO REGI
19	COBV	-128-127	X(*1)	BLUE V CENT OFFSET DATA OF AUTO REGI
20	COGH	-128-127	X(*1)	GREEN H CENT OFFSET DATA OF AUTO REGI
21	CORH	-128-127	X(*1)	RED H CENT OFFSET DATA OF AUTO REGI
22	COBH	-128-127	X(*1)	BLUE H CENT OFFSET DATA OF AUTO REGI
23	SOGV	-128-127	X(*1)	GREEN V SKEW OFFSET DATA OF AUTO REGI
24	SORV	-128-127	X(*1)	RED V SKEW OFFSET DATA OF AUTO REGI
25	SOBV	-128-127	X(*1)	BLUE V SKEW OFFSET DATA OF AUTO REGI
26	SOGH	-128-127	X(*1)	GREEN H SKEW OFFSET DATA OF AUTO REGI
27	SORH	-128-127	X(*1)	RED H SKEW OFFSET DATA OF AUTO REGI
28	SOBH	-128-127	X(*1)	BLUE H SKEW OFFSET DATA OF AUTO REGI
29	ERR	FIXED	0	AUTO REGI ERROR CODE
30	ADTM	0-255	144	TIMING TO GET A/D DATA OF AUTO REGI
31	VUP	1-255	1	AUTO REGI PATTERN UPPER V POSITION
32	VMID	1-255	102	AUTO REGI PATTERN MIDDLE V POSITION
33	VLOW	1-255	212	AUTO REGI PATTERN LOWER V POSITION
34	HPR	1-510	1	AUTO REGI PATTERN H POSITION
GRN	CENT	-512-511	000 / 000	GREEN H/V CENT
	SKEW	-512-511	000 / 000	GREEN H/V SKEW
	SIZE	-512-511	-70/-190	GREEN H/V SIZE
	LIN	-512-511	xxxx / xxxx	GREEN H/V LIN
	KEY	-512-511	xxxx / xxxx	GREEN H/V KEY
	PIN	-512-511	xxxx / 271	GREEN H/V PIN
BLU	CENT	-512-511	000 / 000	BLUE H/V CENT
	SKEW	-512-511	080 / -130	BLUE H/V SKEW
	SIZE	-512-511	-20 / -226	BLUE H/V SIZE
	LIN	-512-511	187 / xxxx	BLUE H/V LIN
	KEY	-512-511	xxxx / -115	BLUE H/V KEY
	PIN	-512-511	xxxx / 198	BLUE H/V PIN
RED	CENT	-512-511	000 / 000	RED H/V CENT
	SKEW	-512-511	080 / -130	RED H/V SKEW
	SIZE	-512-511	-61 / -206	RED H/V SIZE
	LIN	-512-511	195 / xxxx	RED H/V LIN
	KEY	-512-511	xxxx / 124	RED H/V KEY
	PIN	-512-511	xxxx / 250	RED H/V PIN

∗ 1 : Set correctly by the automatic resistration adjustment.

xxxx : Cannot change.

3DCM

ITEM NUMBER	ADJUSTMENT ITEM	DATA RANGE	STANDARD DATA	NOTE
0	NRMD	0-3	0	NOISE REDUCER MODE
1	DYCO	0-15	2	ΔY CORING LEVEL SETTING
2	DYGA	0-15	10	ΔY GAIN SETTING
3	DCCO	0-15	5	ΔC CORING LEVEL SETTING
4	DCGA	0-15	5	ΔC GAIN SETTING
5	SELD	0,1	1	SELECT ΔY SIGNAL FILTER
6	D2GA	0-7	4	ΔY/C 2nd GAIN SETTING
7	VTRH	0-3	1	VTR HSYNC HYSTERESIS SETTING
8	VTRR	0-3	1	VTR HSYNC REFERENCE SETTING
9	LDSR	0-3	2	LD SIGNAL REFERENCE
10	VAPG	0-7	5	V APERTURE GAIN
11	VAPI	0-31	11	V APERTURE INVERT POINT
12	YPFT	0-3	0	Y PEAKING FILTER TAP
13	YPFG	0-15	9	Y PEAKING FILTER GAIN
14	V1PS	0-3	2	VERTICAL 1-LINE SELECTOR
15	VEGS	0-3	1	VERTICAL EDGE SELECTOR
16	CC3N	0,1	0	C SIGNAL 3-LINE COM FILTER
17	HDP	0-7	4	HD HORIZONTAL PHASE
18	CDL	0-7	4	C DELAY
19	HSSL	0-15	12	H SYNC SLICE LEVEL
20	VSSL	0-15	8	V SYNC SLICE LEVEL
21	HPLF	0,1	1	H PLL FILTER
22	BPLF	0,1	0	BURST PLL FILTER
23	FSCF	0,1	1	FSC FILTER GAIN
24	PLFG	0,1	1	PLL FILTER GAIN
25	EXAD	0,1	1	EXTERNAL AD IN
26	MSS	0,1	0	FORCED MOTION SIGNAL
27	COUT	0-3	2	C SIGNAL OUTPUT
28	YAPS	0-3	1	Y APERTURE
29	NSDS	0-3	0	NON STD SIGNAL DETECT.
30	CPP	0-3	0	CLAMP PULSE & AD RANGE
31	YHCO	0-3	1	Y HIGH FREQ.SIGNAL CORING
32	YPCO	0,1	0	Y PEAK FILTER CORING OFF
33	KILR	0-15	3	KILLER REFERENCE
34	BGPS	0-15	4	BGP START POSITION
35	BGPW	0-15	10	BGP WIDTH
36	ADCL	0-3	2	AD CLOCK DELAY
37	PWRF	0,1	0	PULSE WIDTH REFERENCE
38	YHCG	0,1	0	Y HIGH FREQ.SIGNAL CORING 1/2 GAIN
39	CKG2	0,1	1	CLOCK GENERATOR TEST BIT
40	CKGE	0,1	0	CLOCK GENERATOR TEST BIT

TONE

ITEM NUMBER	ADJUSTMENT ITEM	DATA RANGE	STANDARD DATA	NOTE
0	RBAS	0-63	39	RESET VALUE OF USER BASS DATA
1	RTRE	0-63	35	RESET VALUE OF USER TREBLE DATA
2	BBEH	0-15	-	BBE HIGH FREQUENCY
3	BBEL	0-11	-	BBE LOW FREQUENCY
4	SUFE	7	-	SURROUND EFFECT

DSP

ITEM NUMBER	ADJUSTMENT ITEM	DATA RANGE	STANDARD DATA	NOTE
0	TB0H	0-255	48	TRUSURROUND EFFECT (L+R) COARSE
1	TB0L	0-255	0	TRUSURROUND EFFECT (L+R) FINE
2	TB1H	0-255	64	TRUSURROUND EFFECT (L-R) COARSE
3	TB1L	0-255	0	TRUSURROUND EFFECT (L-R) FINE
4	TB2H	0-255	64	TRUSURROUND EFFECT (C) COARSE
5	TB2L	0-255	0	TRUSURROUND EFFECT (C) FINE
6	TBFH	0-255	165	TRUSURROUND EFFECT (S) COARSE
7	TBFL	0-255	126	TRUSURROUND EFFECT (S) FINE
8	TC0H	0-255	90	TRUSURROUND EFFECT (S) COARSE
9	TC0L	0-255	130	TRUSURROUND EFFECT (S) FINE
10	TC1H	0-255	11	TRUSURROUND EFFECT (L,R) COARSE
11	TC1L	0-255	100	TRUSURROUND EFFECT (L,R) FINE
12	SADH	0-255	64	SRS SPACE LEVEL COARSE
13	SADL	0-255	0	SRS SPACE LEVEL FINE
14	SB0H	0-255	92	SRS CENTER LEVEL COARSE
15	SB0L	0-255	0	SRS CENTER LEVEL FINE

MC

ITEM NUMBER	ADJUSTMENT ITEM	DATA RANGE	STANDARD DATA	NOTE
0	MYDR	0-31	22	MAIN Y DRIVE
1	MSHU	0-63	31	MAIN SUB HUE
2	MSCL	0-63	31	MAIN SUB COLOR
3	MUPD	0-15	7	MAIN U PEDESTAL OFFSET
4	MVPD	0-15	7	MAIN V PEDESTAL OFFSET
5	MDLY	0-3	0	MAIN Y DELAY
6	MU2P	0-15	7	MAIN U2 PEDESTAL OFFSET
7	MV2P	0-15	7	MAIN V2 PEDESTAL OFFSET
8	MY2D	0-31	19	MAIN Y2 DRIVE
9	MU2D	0-31	11	MAIN U2 DRIVE
10	MV2D	0-31	11	MAIN V2 DRIVE
11	MPRE	0-3	3	MAIN PRE-OVER

SC

ITEM NUMBER	ADJUSTMENT ITEM	DATA RANGE	STANDARD DATA	NOTE
0	SYDR	0-31	28	SUB Y DRIVE
1	SSHU	0-63	31	SUB SUB HUE
2	SSCL	0-63	31	SUB SUB COLOR
3	SUPD	0-15	7	SUB U PEDESTAL OFFSET
4	SVPD	0-15	7	SUB V PEDESTAL OFFSET
5	SDLY	0-3	0	SUB Y DELAY
6	SU2P	0-15	7	SUB U2 PEDESTAL OFFSET
7	SV2P	0-15	7	SUB V2 PEDESTAL OFFSET
8	SY2D	0-3	20	SUB Y2 DRIVE
9	SU2D	0-15	11	SUB U2 DRIVE
10	SV2D	0-15	11	SUB V2 DRIVE
11	SPRE	0-3	3	SUB PRE-OVER

IC

ITEM NUMBER	ADJUSTMENT ITEM	DATA RANGE	STANDARD DATA	NOTE
0	PCDR	0-15	7	PIP COLOR
1	PHDR	0-15	7	PIP HUE
2	PAFC	0-3	2	PIP AFC LOOP GAIN
3	PTAD	0-15	7	PIP TRAP F0 ADJUSTMENT
4	PTOT	0,1	0	PIP CHROMA TOT FILTER
5	PSCN	0-15	7	PIP SUB CONTRAST
6	PYDC	0-7	0	PIP Y DC TRAN
7	PSHP	0,1	1	PIP SHARPNESS F0
8	PMSK	0,1	0	PIP MACRO VISION MASK

PP

ITEM NUMBER	ADJUSTMENT ITEM	DATA RANGE	STANDARD DATA	NOTE
0	BGHP	0-15	10	PIP H POSITION
1	BGHN	0-15	7	PIP H POSITION FOR NO SIGNAL
2	BGVP	0-15	7	PIP V POSITION
3	6BIT	0,1	1	6BIT(SMART6/SKIP6) MATRIX
4	MAHP	0-15	7	MAIN H ACQUISITION
5	MAVP	0-255	23	MAIN V ACQUISITION
6	SAHP	0-15	7	SUB H ACOUISITION
7	SAVP	0-255	23	SUB V ACQUISITION
8	DECS	0-31	18	SUB DECODER REGISTERS
9	DECM	0-31	18	MAIN DECODER REGISTERS
10	DIS	0-127	66	DISPLAY SETTING
11	BSIZ	0-15	2	BORDER SIZE
12	VPED	0-15	13	V PEDESTAL OFFSET
13	UPED	0-15	13	U PEDESTAL OFFSET

DAC

ITEM NUMBER	ADJUSTMENT ITEM	DATA RANGE	STANDARD DATA	NOTE
0	UVSH	0-63	31	YUV SUB HUE
1	UVSC	0-63	31	YUV SUB COLOR

PI

ITEM NUMBER	ADJUSTMENT ITEM	DATA RANGE	STANDARD DATA	NOTE
0	PIPH		-	PIP H POSITION
1	PIPV		-	PIP V POSITION
2	PYSD		-	PIP SELECT DELAY
3	PYDL		-	PIP Y DELAY
4	PHDL		-	H-PULSE DELAY
5	PMVD		-	MAIN V-PULSE DELAY
6	PIVD		-	INSET V-PULSE DELAY
7	PCON		-	INSET CONTRAST
8	FRMY		-	FRAME Y
9	IPER		-	PIP PEDESTAIJ R-Y
10	IPEB		-	PIP PEDESTAL B-Y
11	PCPS		-	PIP CLP
12	PCPF		-	PIP CLP CYCLES
13	PPLL		-	PIP PLL TIME CONSTANT
14	PVNR		-	PIP VSP PULSE NOISE REDUCTION

ID

ITEM NUMBER	ADJUSTMENT ITEM	DATA RANGE	STANDARD DATA	NOTE
0	AREA	0-3	0	AREA ID
1	SERS	0-3	0	SERIES ID
2	VCHP	0-3	0	V CHIP ID

CCD

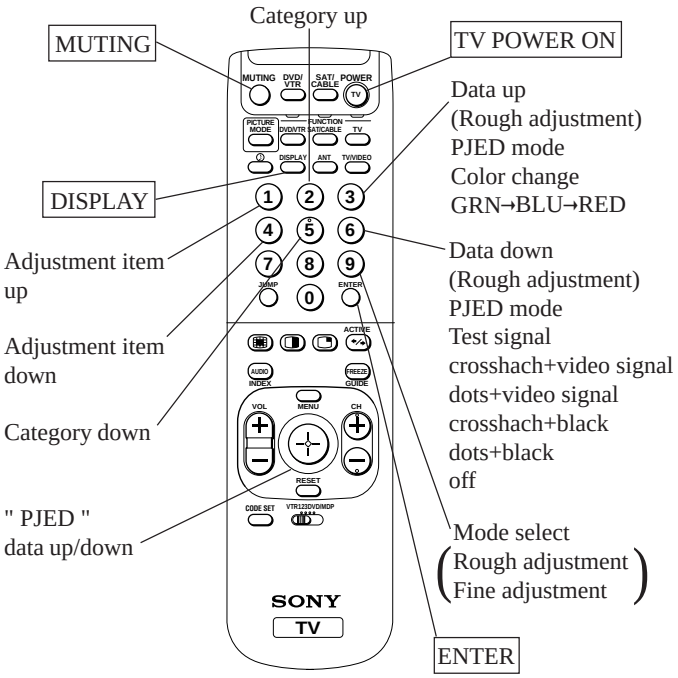
ITEM NUMBER	ADJUSTMENT ITEM	DATA RANGE	STANDARD DATA	NOTE
0	CCHP	0-63	39	OSD H POSI FOR INDEX & CC/XDS
1	CCHN	0-63	29	NO FUNCTION

OP

ITEM NUMBER	ADJUSTMENT ITEM	DATA RANGE	STANDARD DATA	NOTE
0	DISP	0-63	9	OSD H POSITION
1	FWl	0-7	2	FIELD1 WINDOW
2	FW2	0-7	3	FIELD2 WINDOW

3-10. REGISTRATION ADJUSTMENT

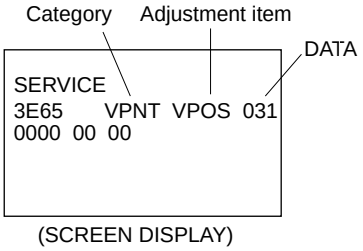
• ADJUST BUTTONS AND INDICATOR



[SETUP FOR ADJUSTMENT]

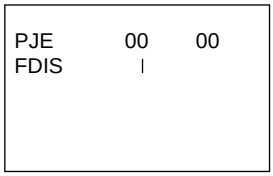
• Current flow in circuit should be stable before attempting adjustment. So wait 5 minutes after turning on the TV power.

1. Set to the service mode by pressing quickly keys on the remote commander in the standby mode in the following order:
   DISPLAY → 5 → VOL+ → TV POWER

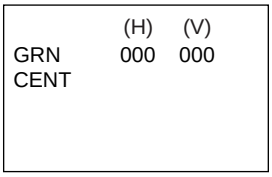


(SCREEN DISPLAY)

2. Change TV mode to the video input mode.
3. Change the VPNT mode to the PJE 00 FDIS.
4. Set FDIS data to “01” to display the registration data of each spot in the fine adjustment.



5. Press 6 to display the test signal (crosshatch) on the screen.
6. Select GRN CENT(*) with the 1 and 4 keys on the remote commander and check that the adjustment data is now “000” both vertically and horizontally.



*: In the factory preset, “GRN CENT” appears on the screen first. In case of other colors “RED” or “BLU”, change color by every pressing 3 key.

7. Set VPNT 28 RON to “000”, 29 GON to “001” and 30 BON to “000” to show only the green color.
8. Change the VPNT mode to the PJE mode.

SUB DEFLECTION ADJUSTMENT ITEM

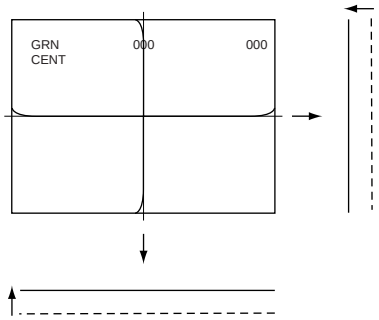
Adjustment O : Yes – : No

Display	Adjustment item	Adjustment type		
		G	R	B
		H/V	H/V	H/V
CENT	CENT	O/O	O/O	O/O
SKEW	SKEW	O/O	O/O	O/O
SIZE	SIZE	–/–	O/O	O/O
LIN	LIN	–/–	O/–	O/–
KEY	KEY	–/–	–/O	–/O
PIN	PIN	–/O	–/O	–/O

[GREEN REGISTRATION ADJUSTMENT]

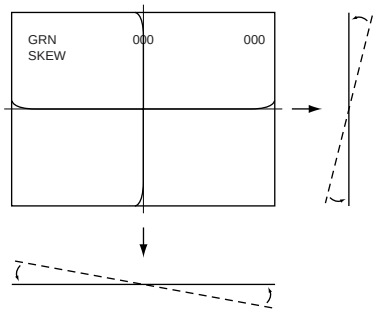
<GREEN CENTER>

1. Select GRN CENT with the 1 and 4 keys on the remote commander.
2. Adjust the crosshatch line goes straight vertically and horizontally with the joystick on the remote commander.



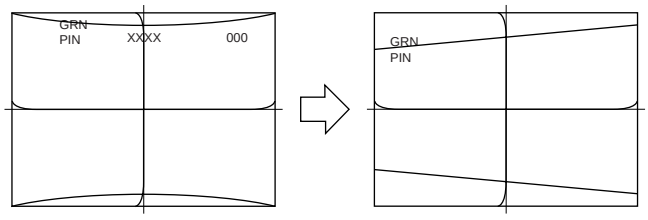
<GREEN SKEW>

1. Select GRN SKEW with the 1 and 4 keys on the remote commander.
2. Adjust the crosshatch line goes straight vertically and horizontally with the joystick on the remote commander.



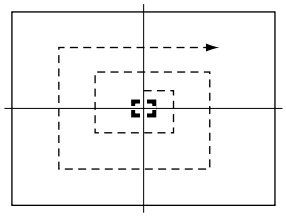
<GREEN PINCUSHION>

1. Select GRN PIN with the 1 and 4 keys on the remote commander.
2. Adjust the crosshatch line goes straight vertically and horizontally with the joystick on the remote commander.

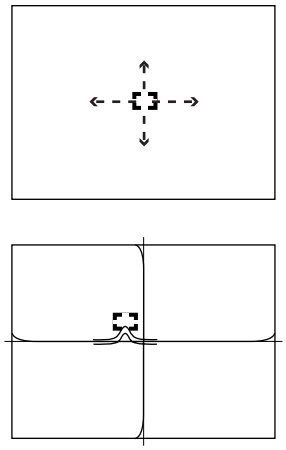


<FINE ADJUSTMENT>

1. Press 9 key on the remote commander to shift to the fine adjustment mode.
   The green marker (in the GRN mode) appears on the center of the screen.
2. Use the 1 and 4 keys or the joystick on the remote commander, move the marker (see below) everywhere you want to adjust and adjust with the joystic keys on the remote commander.
   Marker movement by the 1 and 4 keys:



   Press once the joystick the marker turns sreen to white.
   Then you can move the marker up and down ,left and right.



3. Press 9 key on the remote commander to shift to the rough

adjustment mode.

[RED REGISTRATION ADJUSTMENT]

<RED CENTER>

1. Change to VPNT mode and set VPNT 28 RON to “001”, 29 GON to “001” and 30 BON to “000” to show the green and red colors.
2. Change the VPNT mode to the PJE mode.
3. Press [3] key on the remote commander to shift the GRN mode to the RED mode.
4. Select RED CENT with the [1] and [4] keys on the remote commander.
5. Adjust the red crosshatch lines go straight vertically and horizontally and overlaps the green lines with the joystick on the remote commander.

<RED SKEW>

1. Select RED SKEW with the [1] and [4] keys on the remote commander.
2. Adjust the red crosshatch lines go straight vertically and horizontally and overlaps the green lines with the joystick on the remote commander.

<RED LINEARITY>

1. Select RED SIZE (vertically and horizontally) or RED LIN (vertically) with the [1] and [4] keys on the remote commander and adjust while tracking each other alternately.
2. Adjust the red crosshatch lines go straight vertically and horizontally and overlaps the green lines with the joystick on the remote commander.

<RED KEY>

1. Select RED KEY with the [1] and [4] keys on the remote commander.
2. Adjust the red crosshatch lines go straight horizontally and overlaps the green lines

with the joystick on the remote commander.

<RED PINCUSHION>

1. Select RED PIN with the [1] and [4] keys on the remote commander.
2. Adjust the red crosshatch lines go straight horizontally and overlaps the green lines with the joystick on the remote commander.

<FINE ADJUSTMENT>

1. Press [9] key on the remote commander to shift to the fine adjustment mode.

   The red marker (in the RED mode) appears on the center of the screen.
2. Use the [1] and [4] keys or the joystick on the remote commander, move the marker everywhere you want to adjust and adjust with the joystick on the remote commander.

[BLUE REGISTRATION ADJUSTMENT]

1. Change to VPNT mode and set VPNT 28 RON to “001”, 29 GON to “001” and 30 BON to “001” to show full color.
2. Change the VPNT mode to the PJE mode.
3. Press [3] key on the remote commander to shift the RED mode to the BLU mode.
4. Adjust BLU CENT, BLU SKEW, BLU SIZE, BLU LIN, BLU KEY and BLU PIN in the same procedure of the red registration adjustment.

[FINAL CHECK]

1. Store the new adjustment (offset) value on the remote control by pressing [MUTING] and [ENTER].
2. Press the FLASH FOCUS button on the front panel.
   (The Offset value is now automatically stored.)
3. Check that no error message appears.
   If an error message appears, recheck.

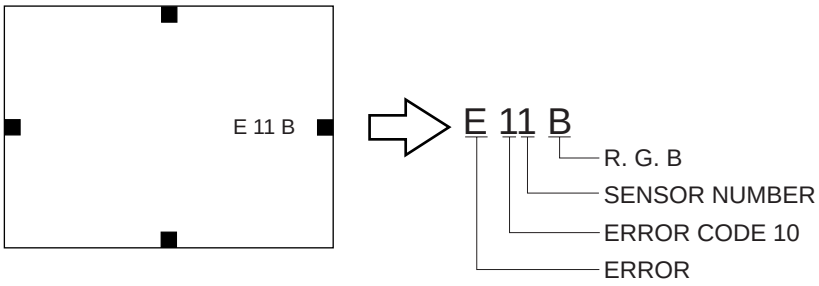
3-11. AUTO REGISTRATION ERROR CODE LIST

[ERROR CODE LIST]

ERROR CODE	DISCRIPTION	NOTE
00	No Error	
10	Sensor Output Level Low	* Check wiring, beam position, sensor. 0 : Upper Center 1 : Middle Left 2 : Middle Right 3 : Lower Center
20	Sensor Output Level High	* Check OP-amp circuit. 0 : Upper Center 1 : Middle Left 2 : Middle Right 3 : Lower Center
30	Adjustment Loop Counter Overflow	* Check the data go far from the standard or not.
40	Regi Data Overflow	* Check the data go far from the standard or not.
50	Regi Data Overflow	* Check the data go far from the standard or not.
60	Offset Overflow	* Check the data go far from the standard or not.
70	Offset Overdrow	* Check the data go far from the standard or not.

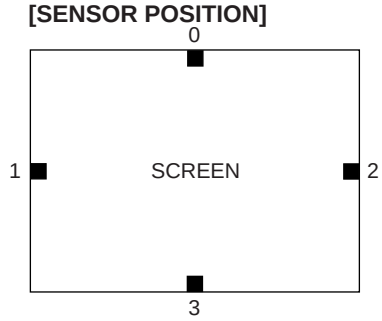
* In case of multiple error, last error is displayed.

• ERROR CODE SCREEN DISPLAY



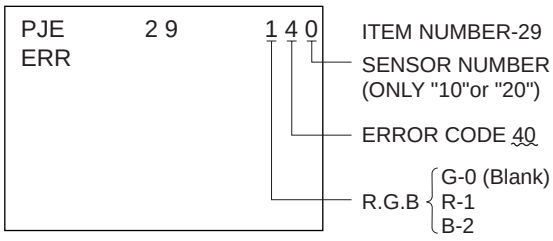
* Error code will be displayed on center of screen for 3 seconds.

[SENSOR POSITION]



0 : UPPER SENSOR
1 : LEFT SENSOR
2 : RIGHT SENSOR
3 : LOWER SENSOR

• ERROR CODE DISPLAY IN REGI SERVICE MODE



MEMO

SECTION 4
SAFETY RELATED ADJUSTMENTS

[G BOARD]

4-1. HV REGULATION CIRCUIT CHECK AND ADJUSTMENT

When replacing the following components marked with ◪ on the schematic diagram always check HV regulation, and if necessary re-adjust.

⧓ : C517
◪ : C517, C521, C522
IC654, L504
T502, T504 (FBT)
D.Y, A board, G board

OPERATION CHECK

1. Connect a HV static voltmeter to the unconnected plug of the high-voltage block. (Fig.4-1)
2. Power on the set.
3. Receive the dot signal. (PICTURE and BRIGHTNESS to minimum)
4. Check that the HV static voltmeter is reading $31.00\pm^{1.0}_{1.5}$ kVdc.

HV Regulation adjustment

1. Connect a HV static voltmeter to the unconnected plug of the hight-voltage block.
2. Power on the set.
3. Receive the dot signal. (PICTURE and BRIGHTNESS to minimum)
4. If anode voltage is 31.95kV or higher, replace C517 of 470PF/2kV with that of 680PF/2kV, and check if the voltage is within the standard range.
5. If anode voltage is 29.45kV or lower, replace C517 of 470PF/2kV with that of 100PF/2kV, and check if the voltage is within the standard range.

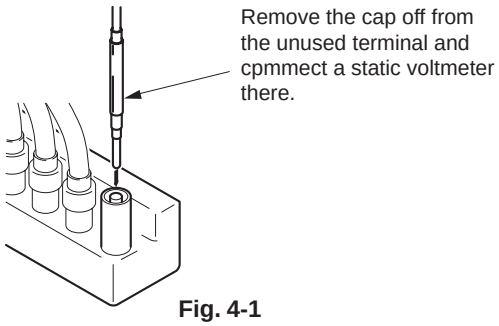


Fig. 4-1

4-2. HV HOLD DOWN CIRCUIT OPERATION CHECK AND ADJUSTMENT

When replacing the following components marked with ◪ on the schematic diagram always check hold-down voltage and if necessary re-adjust.

⧓ : R536, R545
◪ : C516, C536
D506, D507, D522
IC206, IC502, IC654
L504, R511, R522, R536, R538, R545,
R548, R584
T502, T504 (FBT)
D.Y, A board, G board

OPERATION CHECK

1. Remove CN652 connecter.
2. Short-circuit across TP-PROT and ground.
3. Connect a HV static voltmeter to the unconnected plug of the high-voltage block.
4. Connect a 220 /200W variable resistor, across pin ② and pin ① of CN652 and connect an external dc power supply unit (200V, class 2A) to pin ③ of CN652.
5. First turn on the external power supply (+B=135V), then turn on the power of the set.
6. Receive the dot signal. (PICTURE and BRIGHTNESS to minimum)
7. Gradually increase the value of the external dc power supply and check that the hold-down circuit operates at a static voltmeter reading of 33.5±1.0kVdc when the raster disappears.

HV HOLD-DOWN ADJUSTMENT

1. Repart steps ① ~ ⑦ as above.
2. If hold down voltage is 34.5kV or higher, remove R536, mount a resistor (150k , 1/4W : RN) onto R545 instead, and check again if the hold-down voltage is within the standard range.
3. If hold down voltage is 32.5kV or lower, mount a resistor (220k , 1/4W : RN) onto R536 and check again if the hold-down voltage is within the standard range.

NOTE : Please finish the adjustment as soon as possible

4-3. +B MAX VOLTAGE CONFIRMATION

The following adjustments should always be performed when replacing IC654.

1. Supply 130VAC to with variable autotransformer.
2. Input a dot signal.
3. Set the PICTURE control and the BRIGHTNESS controls to minimum.
4. Confirm the voltage of G BOARD TP135V is less than 137.0Vdc.
5. If step 4 is not satisfied, replace IC654 and repeat above steps.

4-4. +B OVP CONFIRMATION

1. Connect an external dc power supply to TP OVP.
2. Supply 120VAC to variable autotransformer.
3. Set PICTURE and the BRIGHTNESS controls to minimum.
4. Gradually turn the external dc power supply, and check if OVP works properly when the voltage of the external dc power supply is between 139.0 ~ 151.5V.

SECTION 5
CIRCUIT ADJUSTMENTS

5-1. TV INPUT SUB CONTRAST ADJUSTMENT (VPNT-SCON)

1. Receive the color-bar signal.
2. Mode : Personal 1 or 2.
   PICTURE : maximum
   COLOR : maximum
   BRIGHTNESS : center
   TRINITONE : medium
   SERVICE DATA VPNT SCON : 7
3. Set to service mode.
4. Connect an oscilloscope between pin ⑦ of CN204 (A board) and ground.
5. Select " VPNT-SCON ", and adjust so that the wave from level is 1.90 ± 0.05Vp-p.
6. Write the data into memory.
   MUTING → ENTER

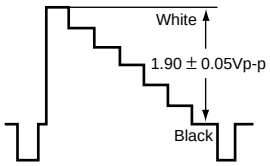


Fig. 5-1

5-2. VIDEO INPUT SUB-HUE AND SUB-COLOR ADJUSTMENT (VPNT-SHUE, SCOL)

1. Select VIDEO1 input and supply the color-bar signal.
2. Mode : Personal 1 or 2.
   PICTURE : maximum
   COLOR : center
   BRIGHTNESS : center
   TRINITONE : medium
   SERVICE DATA VPNT-SHUE : 7
   VPNT-SCOL : 7
3. Set to service mode.
4. Connect an oscilloscope between pin ⑤ of CN204 (A board) connecter and ground.
5. Select " VPNT-SHUE, SCOL ", and adjust them to have VB1 = VB4 and VB2 = VB3 in the waveform levels.
6. Increase SCOL by 2 steps.
7. Write the data into memory.
   MUTING → ENTER

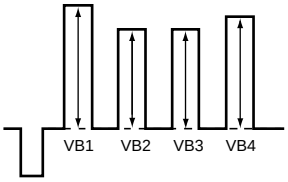


Fig. 5-2

5-3. COMPONENT INPUT SUB-HUE AND SUB-COLOR ADJUSTMENT (DAC-UVSH, UVSC)

1. Select VIDEO 4 and supply the color-bar signal.
   VIDEO input
2. Mode : Personal 1 or 2.
   PICTURE : maximum
   COLOR : center
   BRIGHTNESS : center
   TRINITONE : medium
   SERVICE DATA DAC UVSH : 31
   DAC UVSC : 31
3. Set to service mode.
4. Connect an oscilloscope between pin ⑤ of CN204 (A board) connecter and ground.
5. Select " DAC-UVSH, UVSC ", and adjust them to have VB1 = VB4 and VB2 = VB3 in the waveform levels.
6. Write the data into memory.
   MUTING → ENTER

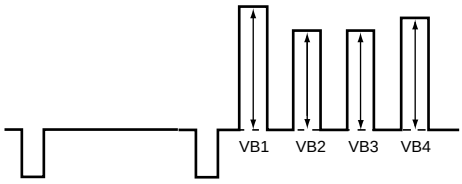


Fig. 5-3

5-4. P & P SUB CONTRAST ADJUSTMENT (SC-SYDR)

1. Receive the signal.
   TV terminal (sub) : color-bar signal
   VIDEO terminal (main) : no signal
2. Set to service mode and set to P & P mode.
3. Connect an oscilloscope between pin ⑦ of CN204 (A board) and ground.
4. Select " SC-SYDR ", and adjust so that the wave from level is 1.75 ± 0.05Vp-p.
5. Write the data into memory.
   MUTING → ENTER

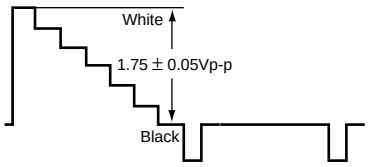


Fig. 5-4

5-5. SUB-HUE , SUB-COLOR AND MAIN CONTRAST ADJUSTMENT (MC-MYDR, MSHU, MSCL, SC-SSHU, SSCL)

1. Receive the color-bar signal.
2. Mode : Personal 1 or 2.
   PICTURE : maximum
   COLOR : center
   BRIGHTNESS : center
   TRINITONE : medium
   SERVICE DATA MC-MYDR : 22
   MC-MSHU : 31
   MC-MSCL : 31
   SC-SSHU : 31
   SC-SSCL : 31
3. Set to service mode and set to P & P model .
4. Connect an oscilloscope between pin ⑤ of CN204 (A board) connecter and ground.
5. Select " MC-MYDR", and adjust them to have VB1 = VB5 in the waveform levels.
6. Select " MC-MSCL, SC-SSCL" and adjust so that the wave form shows VB1=VB4 and VB5=VB8.
7. Select " MC-MSHU, SC-SSHU" and adjust so that the wave form shows VB2=VB3 and VB6=VB7.
8. Write the data into memory.
   MUTING → ENTER

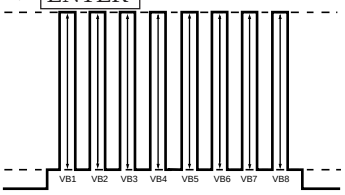


Fig. 5-5

5-6. BAR DISPLAY POSITION ADJUSTMENT (OP-DISP)

1. Receive the monoscope signal.
2. Set to service mode.
3. Push " PICTURE +" . (Bar is displayed)
4. Select " OP-DISP " , and adjust so that the bar is as shown in the figure.
5. Write the data into memory.
   MUTING → ENTER

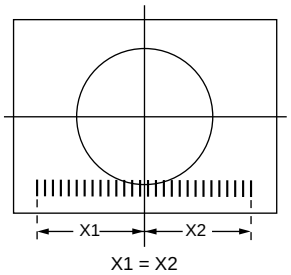


Fig. 5-6

5-7. PIP ACQUISITION AREA ADJUSTMENT (PP-MAHP, SAHP)

1. Set the SPLIT mode.
2. Receive the monoscope signal on the main/sub picture.
3. Check the monoscope position of each picture.

   A=B

4. If necessary, set to service mode and adjust "PP-MAHP, SAHP".
5. Write the data into memory.
   MUTING → ENTER

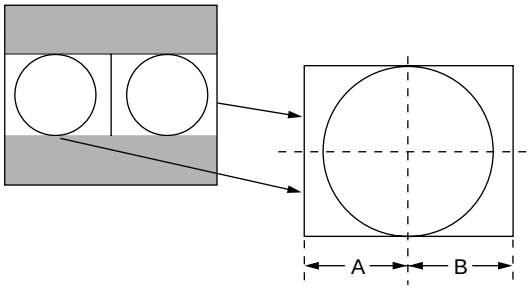


Fig. 5-7

5-8. DISPLAY POSITION FOR CHANNEL INDEX MODE (CCD-CCHP)

1. Recive the broadcast signal for main picture.
2. Set to service mode.
3. Select index mode.
4. Adjust " CCD-CCHP" to get all channel number displays into picture area without being on border.
5. Write the data into memory.
   MUTING → ENTER

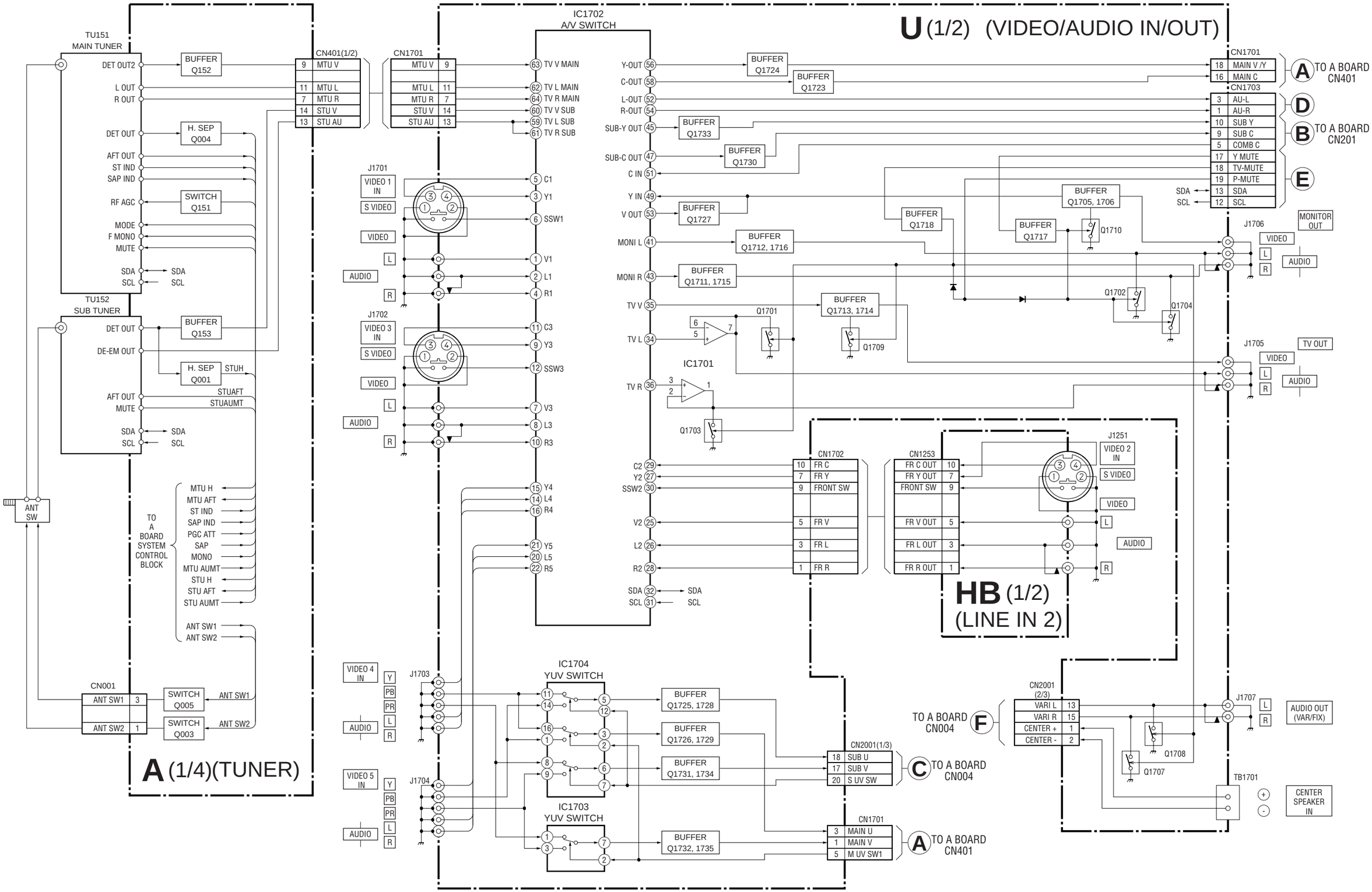
2X	5X	7X	9X
125X		5	11X
36X			13X
23X	19X	17X	14X

KEEP ONE CHARACTER SPACE BETWEEN CH# AND BORDER.

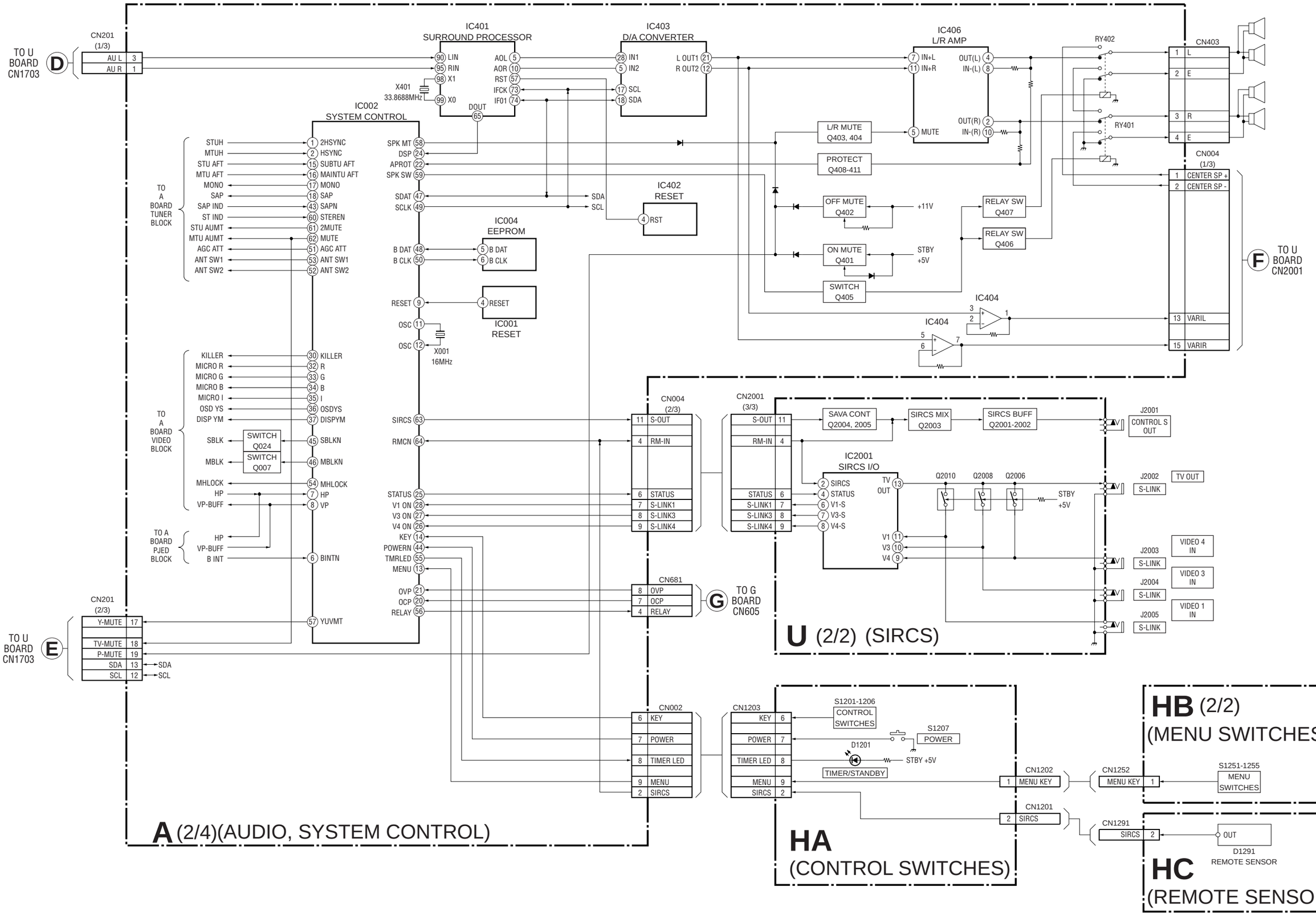
Fig. 5-8

SECTION 6
DIAGRAMS

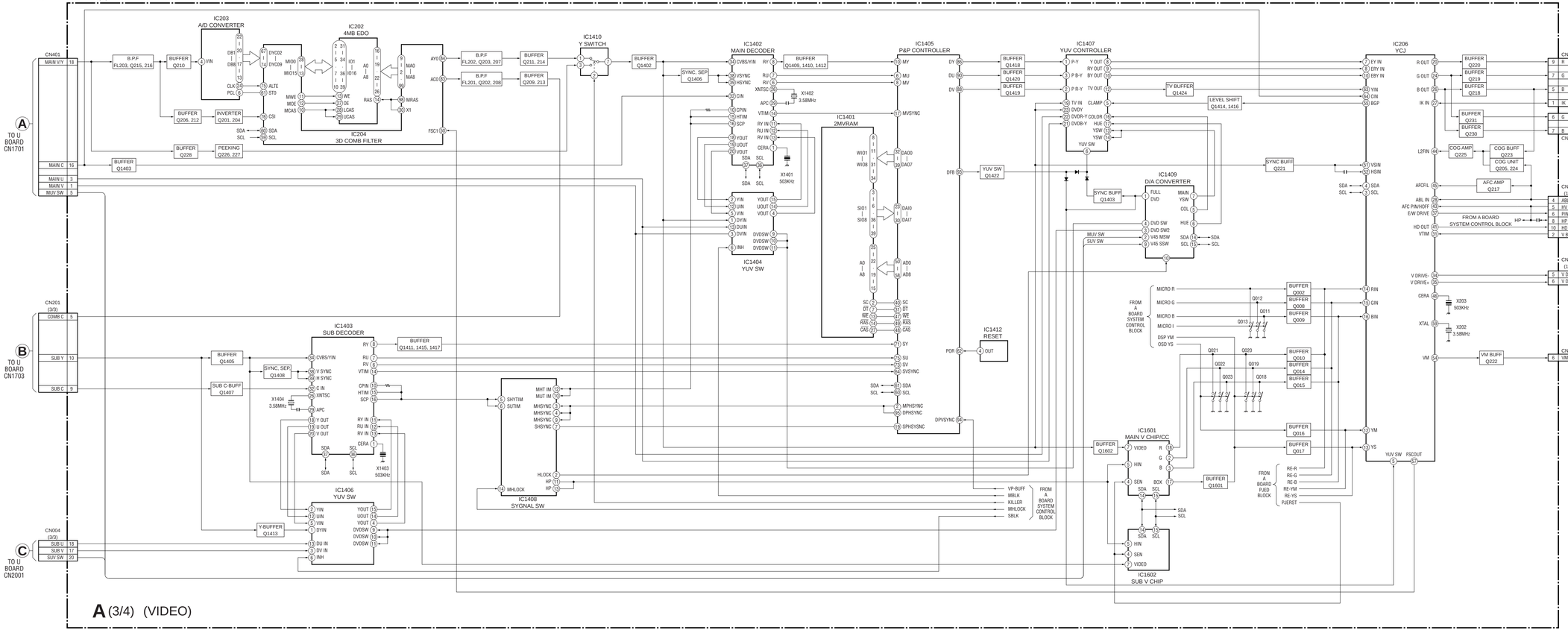
6-1. BLOCK DIAGRAM (1)



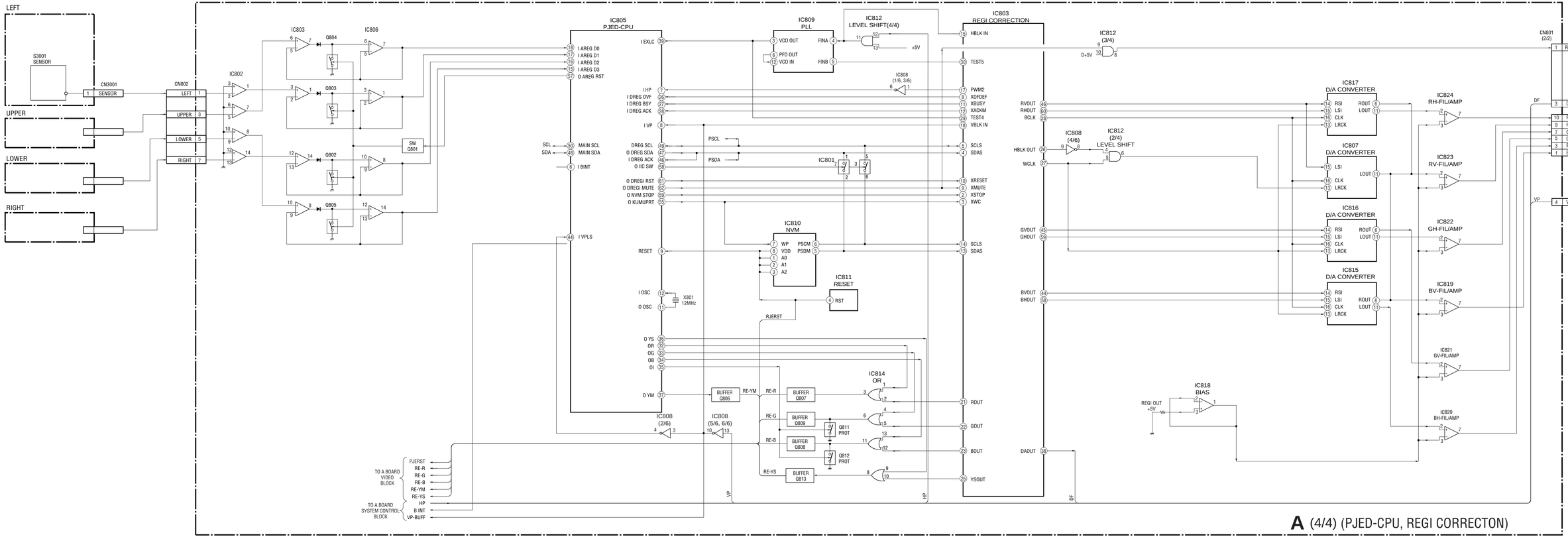
BLOCK DIAGRAM (2)



BLOCK DIAGRAM (3)

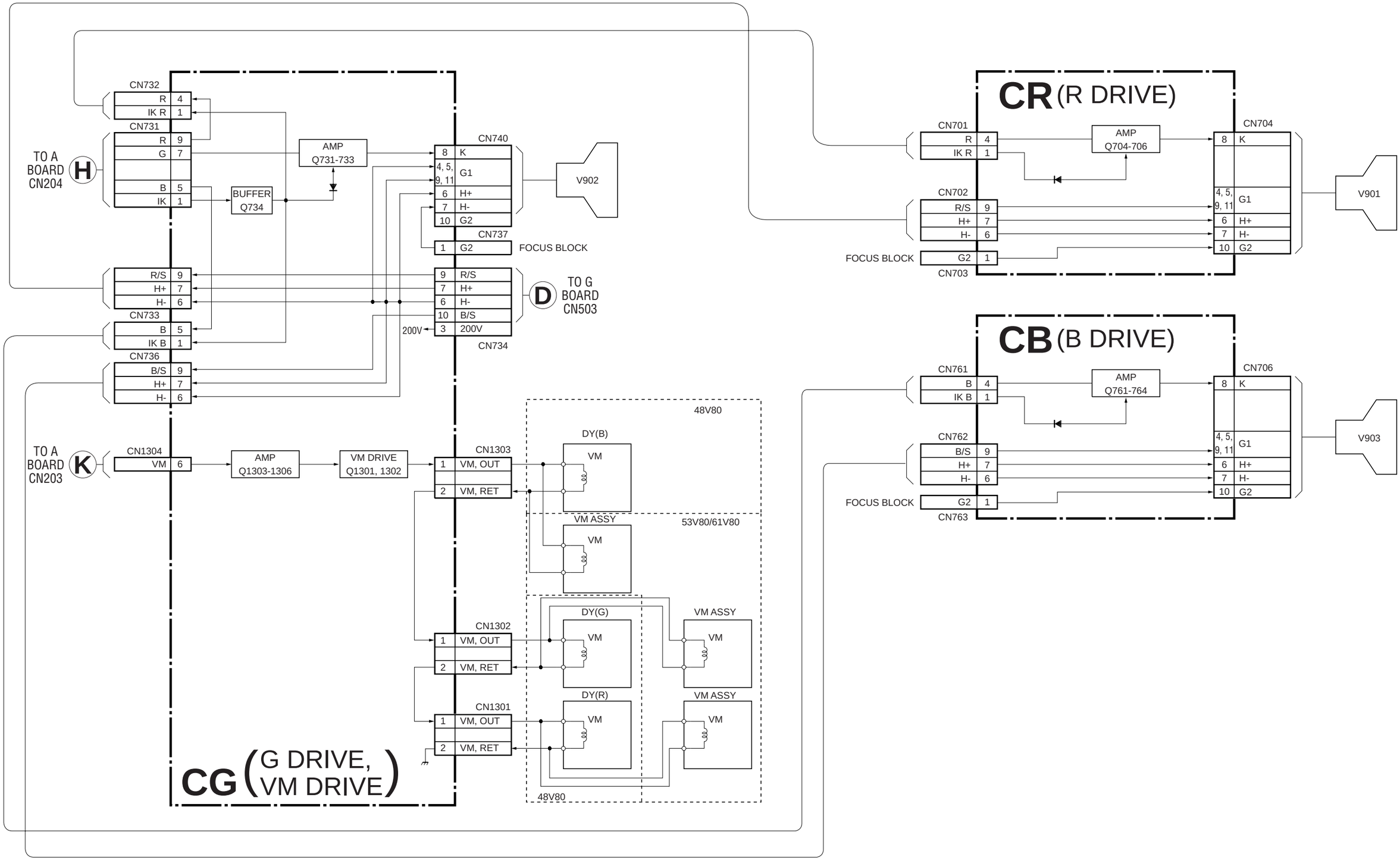


BLOCK DIAGRAM (4)

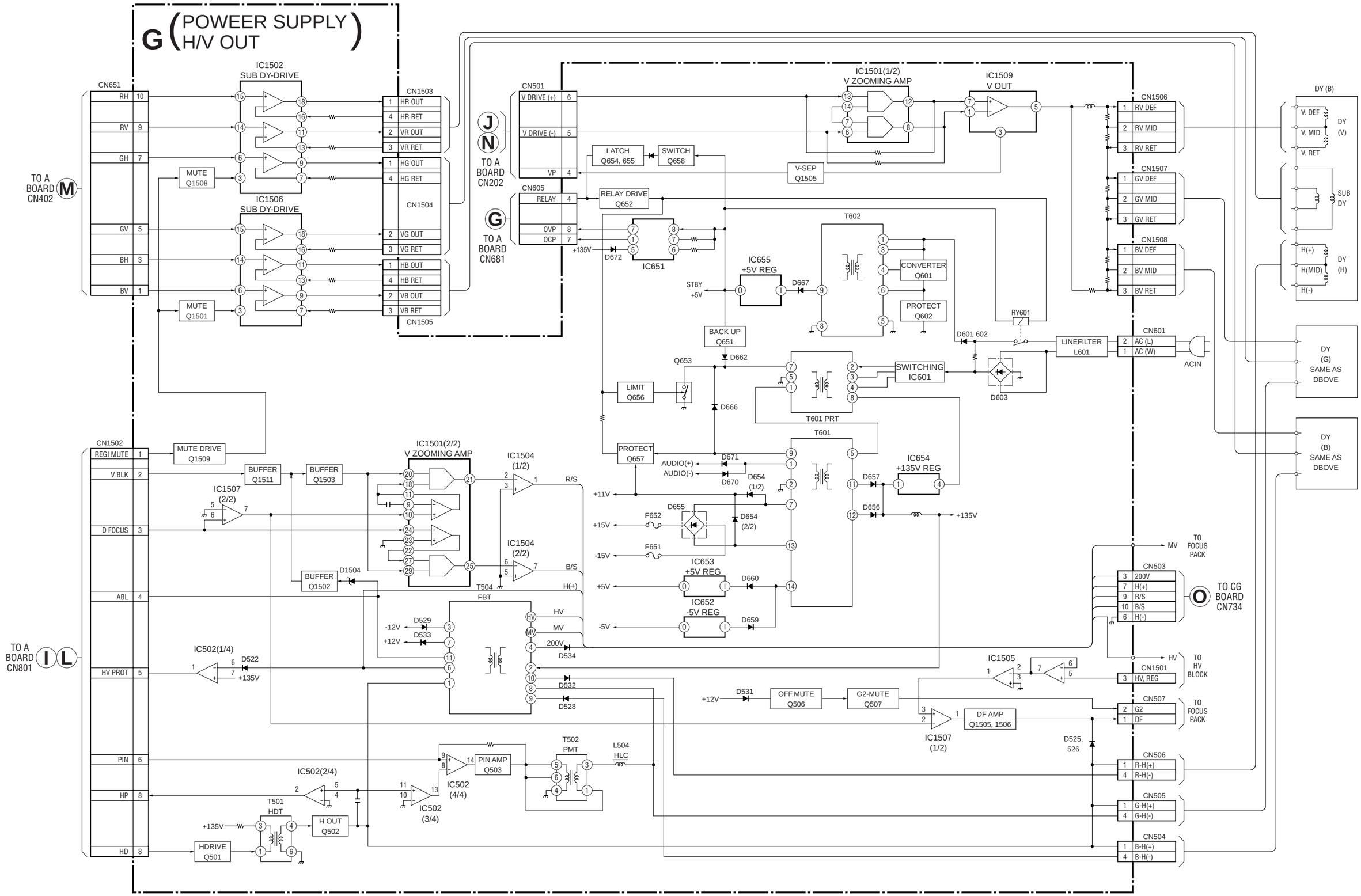


KP-48-53-61V80-BD-6-M

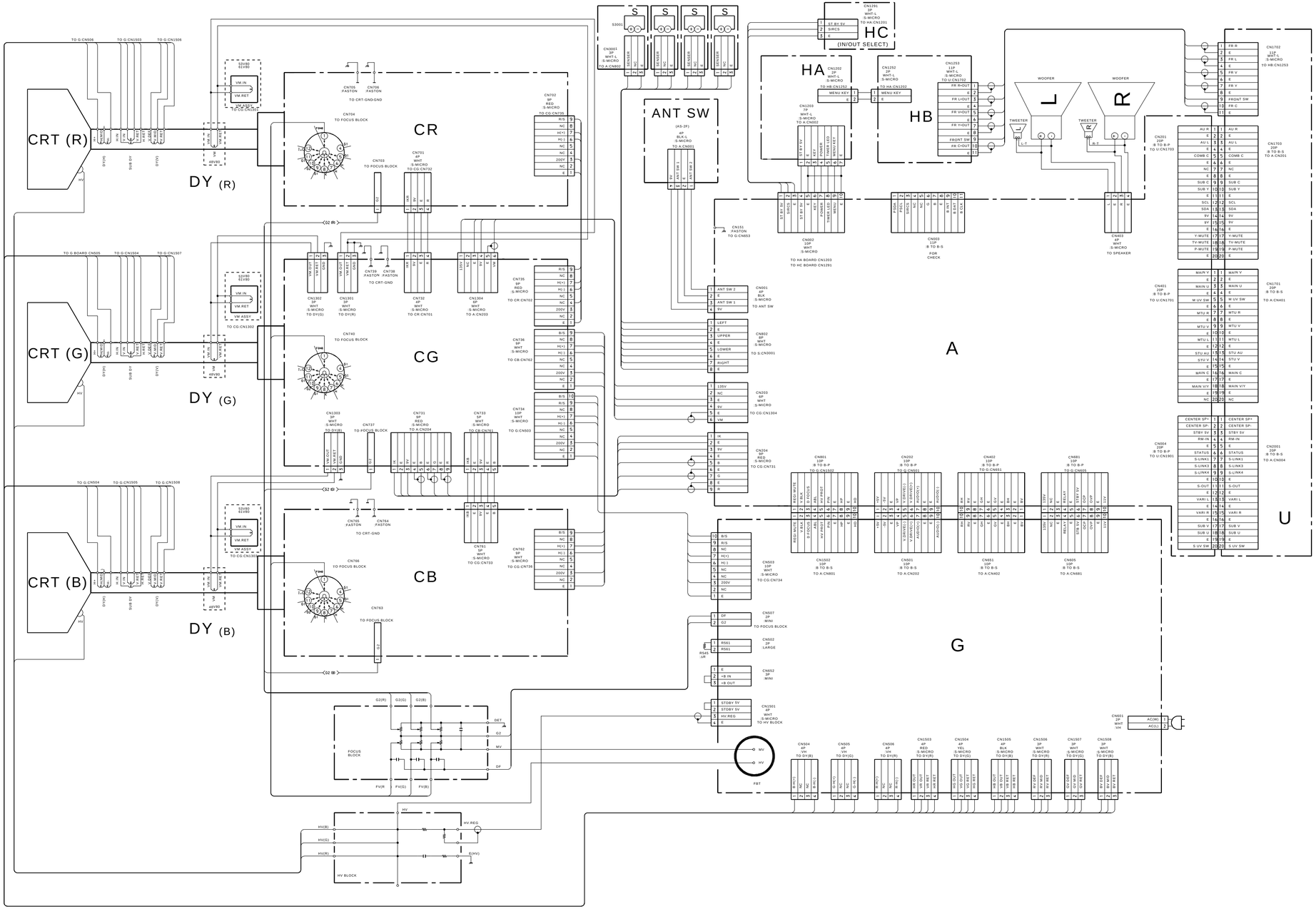
BLOCK DIAGRAM (5)



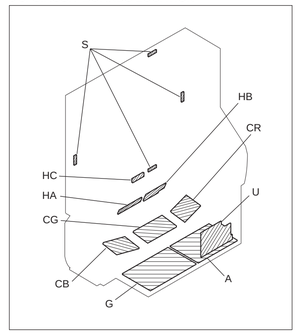
BLOCK DIAGRAM (6)



6-2. FRAME SCHEMATIC DIAGRAM



6-3. CIRCUIT BOARDS LOCATION



Note: The symbol ▭ display is on the component slde.

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

The symbol ▭ indicate fast operating fuse. Replace only with fuse of same rating as maked.

Note: Les composants identifiés per un tramé et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

Le symbole ▭ indique une fusible a action rapide. Doit etre remplacee par une fusible de meme yaleur, comme maque.

6-4. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

Note:

- Capacitors without voltage indication are all 50V.
- All resistors are in ohms.
  kΩ=1000Ω, MΩ=1000kΩ
- Indication of resistance, which dose not have one for rating electrical power, is as follows.

  Pitch : 5mm
  Rating electrical power : 1/4 W
- ▭ : nonflammable resistor.
- ▭ : fusible resistor.
- △ : internal component.
- ▭ : panel designation and adjustment for repair.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- ⏚ : earth-chassis.
- The components identified by ✖ in this basic schematic diagram have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation.
  Should replacement be required, replace only with the value originally used.
- When replacing components identified by ◪ , make the necessary adjustments indicated. If results do not meet the specified value, change the component identified by ✖ and repeat the adjustment until the specified value is achieved. (Refer to R536,R545 and C517 adjustment on Page 51 – 52.)
- When replacing the part in below table, be sure to perform the related adjustment.

Part replaced (◪)	Adjustment (✖)
C517, C521, C522, IC654, L504, T502, T504, DY, A board, G board	HV Regurator (C517)
C516, C536, D506, D507, D522, IC206, IC502, IC654, L504, R511, R522, R536, R538, R545, R548, R584, T502, T504, DY, A board, G board	HV HOLD-DOWN (R536, R545)

- Readings are taken with a color-bar signal input.
- Readings are taken with a 10MΩ digital multimeter.
- Voltages are dc with respect to ground unless otherwise noted.
- Voltage variations may be noted due to normal production tolerances.
- All voltages are in V.
  ⁄ : Measurement impossibility.
- Circled numbers are waveform references.
- ▬▬ : B+ bus.
- ▬ ▬ ▬ : B– bus.
- ⇨ : signal path.(RF)

Reference information

RESISTOR : RN METAL FILM
: RC SOLID
: FPRD NONFLAMMABLE CARBON
: FUSE NONFLAMMABLE FUSIBLE
: RW NONFLAMMABLE WIREWOUND
: RS NONFLAMMABLE METAL OXIDE
: RB NONFLAMMABLE CEMENT
: ※ ADJUSTMENT RESISTOR
COIL : LF-BL MICRO INDUCTOR
CAPACITOR : TA TANTALUM
: PS STYROL
: PP POLYPROPYLENE
: PT MYLAR
: MPS METALIZED POLYESTER
: MPP METALIZED POLYPROPYLENE
: ALB BIPOLAR
: ALT HIGH TEMPERATURE
: ALR HIGH RIPPLE

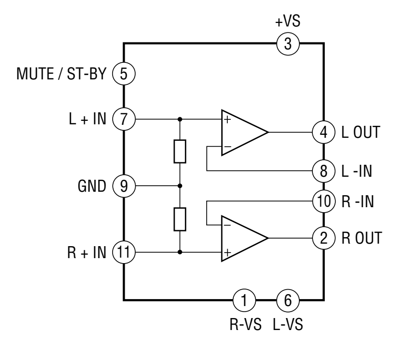
Terminal name of semiconductors in silk screen printed circuit (✱)

	Device	Printed symbol	Terminal name	Circuit
①	Transistor		Collector Base ▭ Emitter	
②	Transistor		Collector Base ▭ Emitter	
③	Diode		Cathode ▭ Anode	
④	Diode		Cathode Anode ▭ (NC)	
⑤	Diode		Cathode Anode ▭ (NC)	
⑥	Diode		Common Anode ▭ Cathode	
⑦	Diode		Common Anode Cathode	
⑧	Diode		Common Anode ▭ Anode	
⑨	Diode		Common Anode Anode	
⑩	Diode		Common Cathode ▭ Cathode	
⑪	Diode		Common Cathode Cathode	
⑫	Diode		Anode ▭ Cathode Anode Cathode Cathode ▭ Anode	
⑬	Transistor (FET)		Drain Source Gate	
⑭	Transistor (FET)		Drain Source Gate	
⑮	Transistor (FET)		□ Source □ Drain □ Gate	
⑯	Transistor		□ Emitter □ Collector □ Base	
⑰	Transistor		C(B)(E) E2 B(C)1	
⑱	Transistor		C1(E)E2 E3 B(C)2	
⑲	Transistor		C1 B2 E2 E3 B1 C2	
⑳	Transistor		C1 B2 E2 E3 B1 C2	
㉑	Transistor		E2 B1 E3 C1 C(B)2	
㉒	Transistor		B(C) B1 E3 E2 C1 C2	
㉓	Transistor		B(C) E2 B1 E3 C1 C2	
–	Discrete semiconductor			

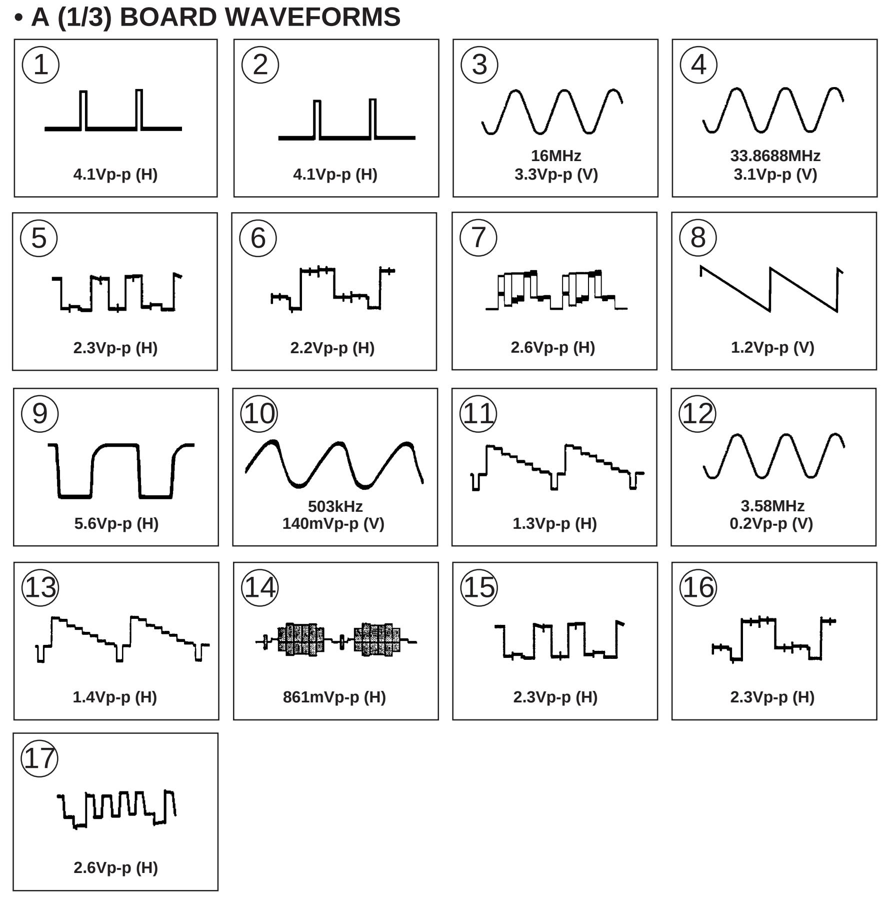
(Chip semiconductors that are not actually used are included.)

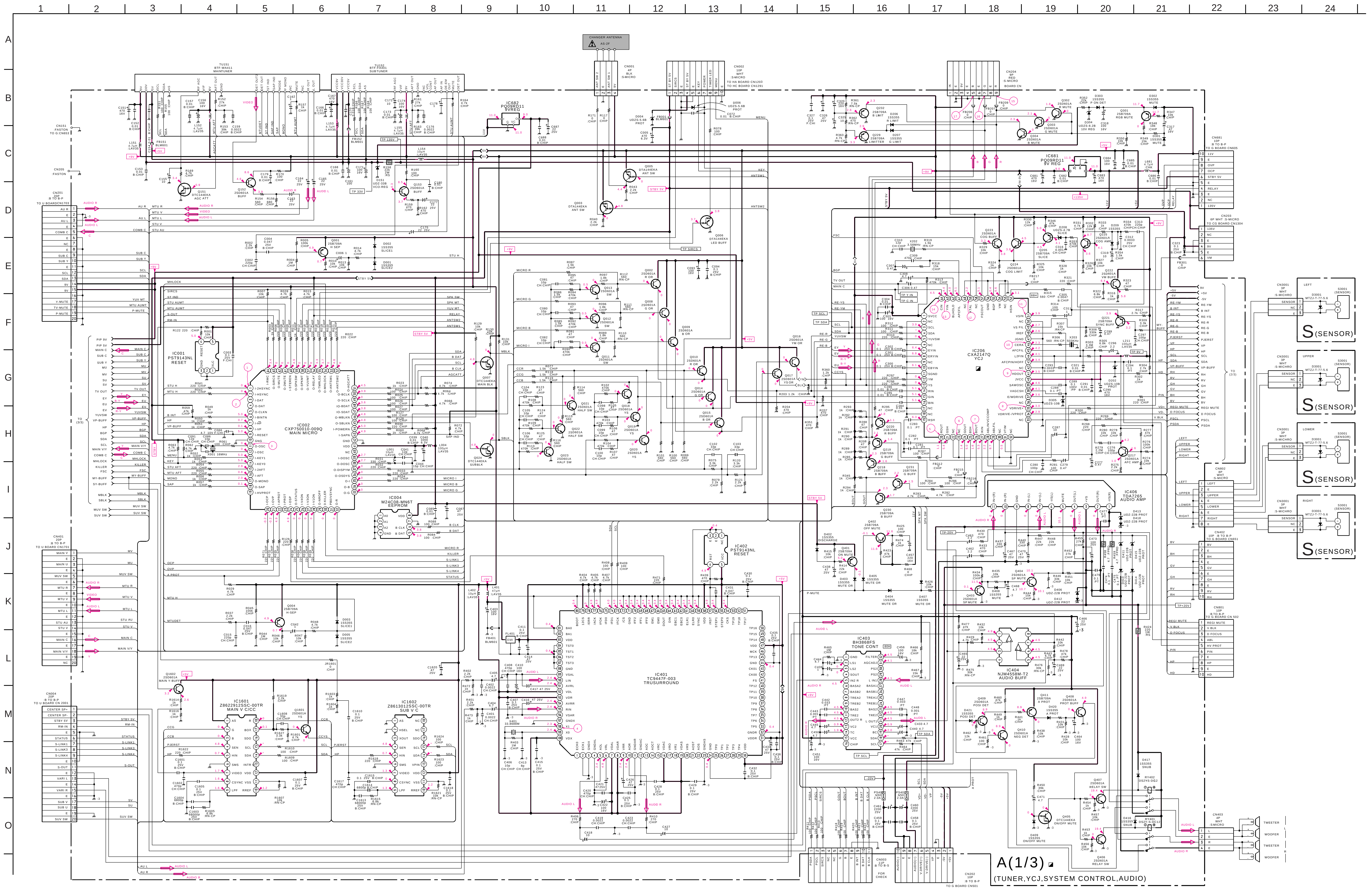
Ver.1.6

A (1/3) BOARD : IC406 TDA7265



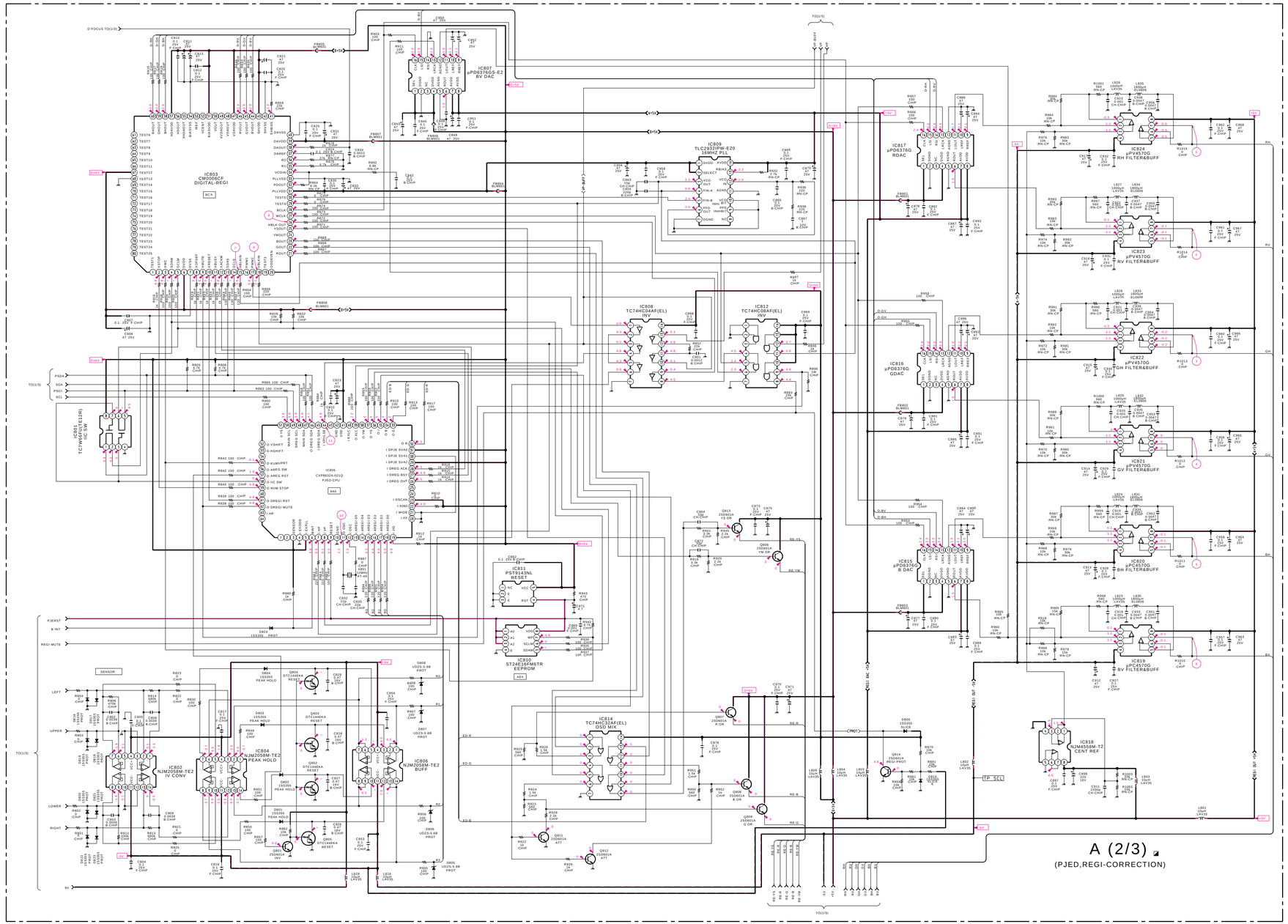
• A (1/3) BOARD WAVEFORMS



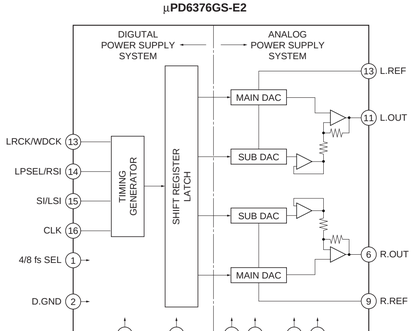


TU151 BTF-WA411 MAINTUNER
TU152 BTF-FA401 SUBTUNER
CHANGER ANTENNA AS-2F
IC682 PQ09RD11 9VREG
IC001 PST9143NL RESET
IC002 CXP750010-009Q MAIN MICRO
IC004 M24C08-MN6T EEPROM
IC1601 Z8622912SSC-00TR MAIN V C/CC
IC1602 Z8613012SSC-00TR SUB V C
IC401 TC9447F-003 TRUSURROUND
IC402 PST9143NL RESET
IC403 BH3868FS TONE CONT
IC404 NJM4558M-T2 AUDIO BUFF
IC406 TDA7265 AUDIO AMP
IC681 PQ09RD11 9V REG
IC206 CXA2147Q YCJ
S(SENSOR)
A(1/3)
(TUNER,YCJ,SYSTEM CONTROL,AUDIO)

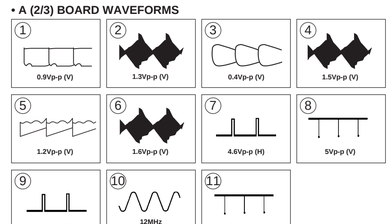
Schematic diagram
A (1/3) S board ➡

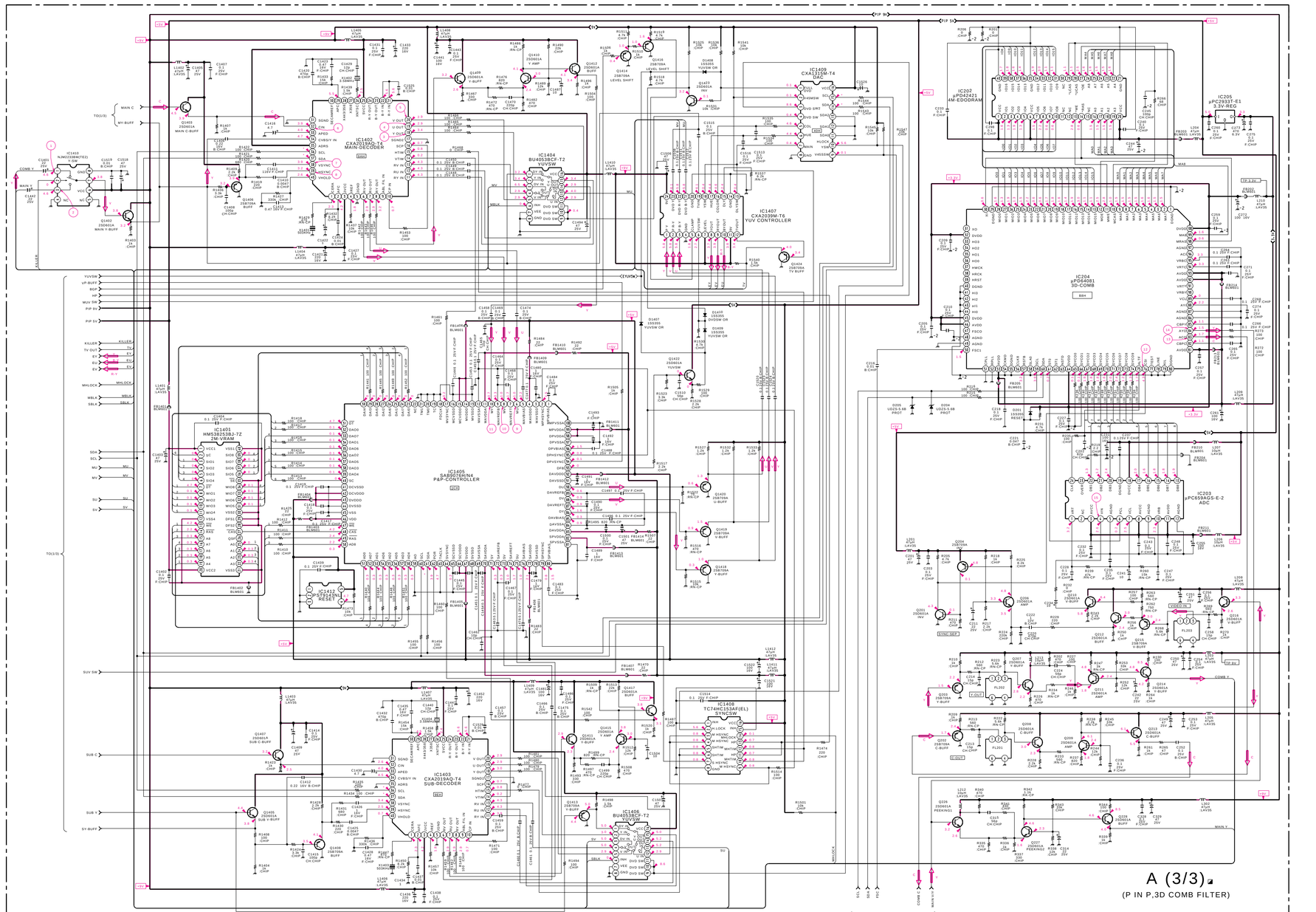


A (2/3) BOARD : IC807, 815, 816, 817
μPD6376GS-E2

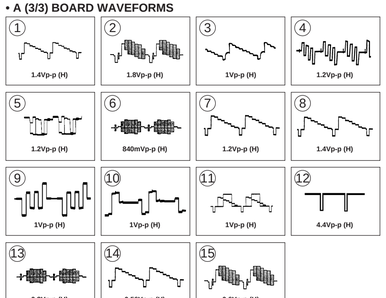


• A (2/3) BOARD WAVEFORMS





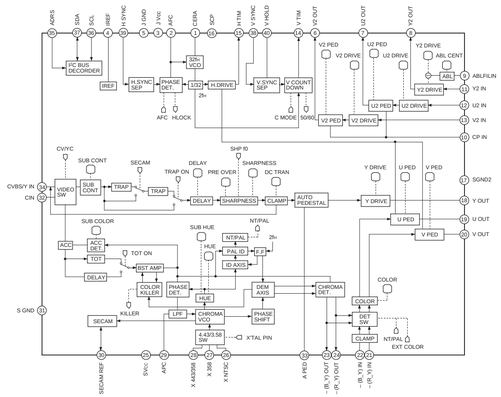
• A (3/3) BOARD WAVEFORMS



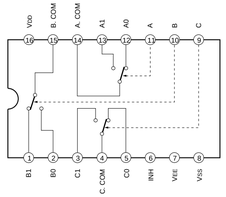
Schematic diagram
A (2/3) board

Schematic diagram
A (1/3) board

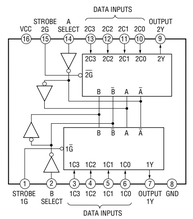
A (3/3) BOARD : IC1402, 1403 CXA2019AQ-T4



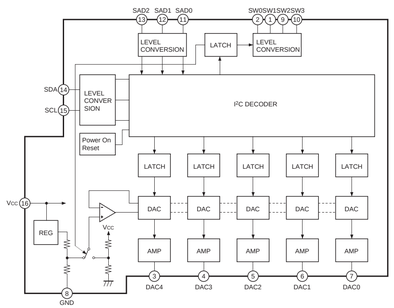
A (3/3) BOARD : IC1404, 1406 BU4053BCF-T2



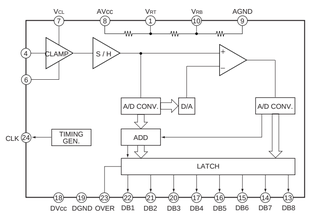
A (3/3) BOARD : IC1408 TC74HC153AF



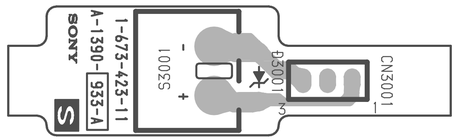
A (3/3) BOARD : IC1409 CXA1315M-T4



A (3/3) BOARD : IC203 μPC659AGS-E2

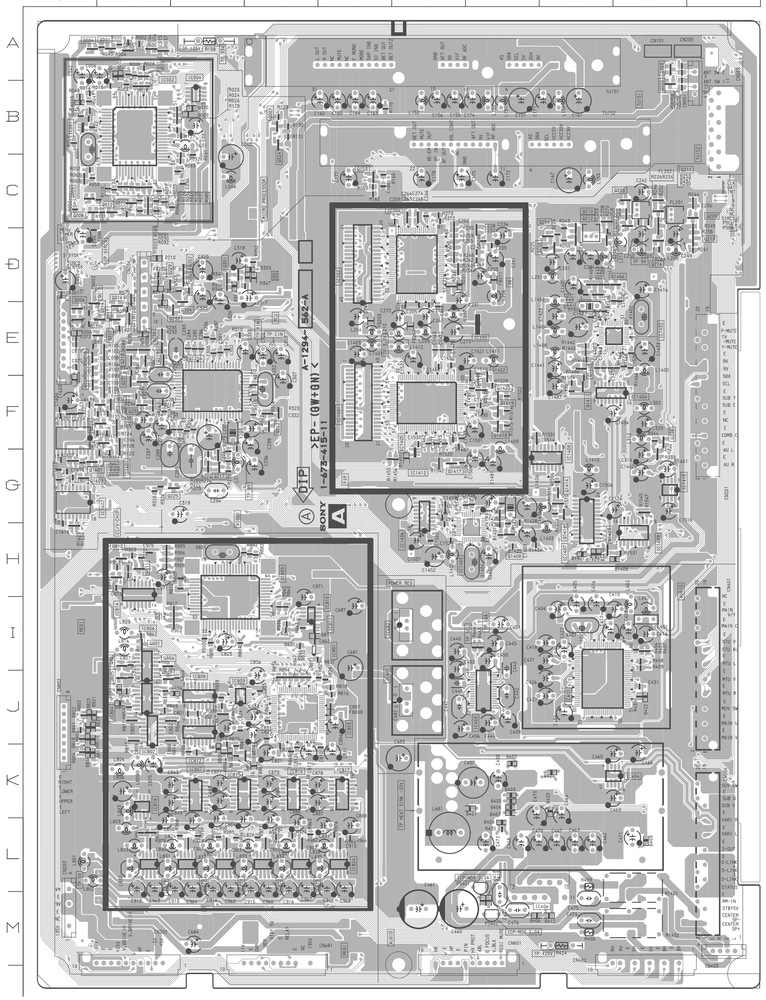


S [P IN P, 3D COMB FILTER]

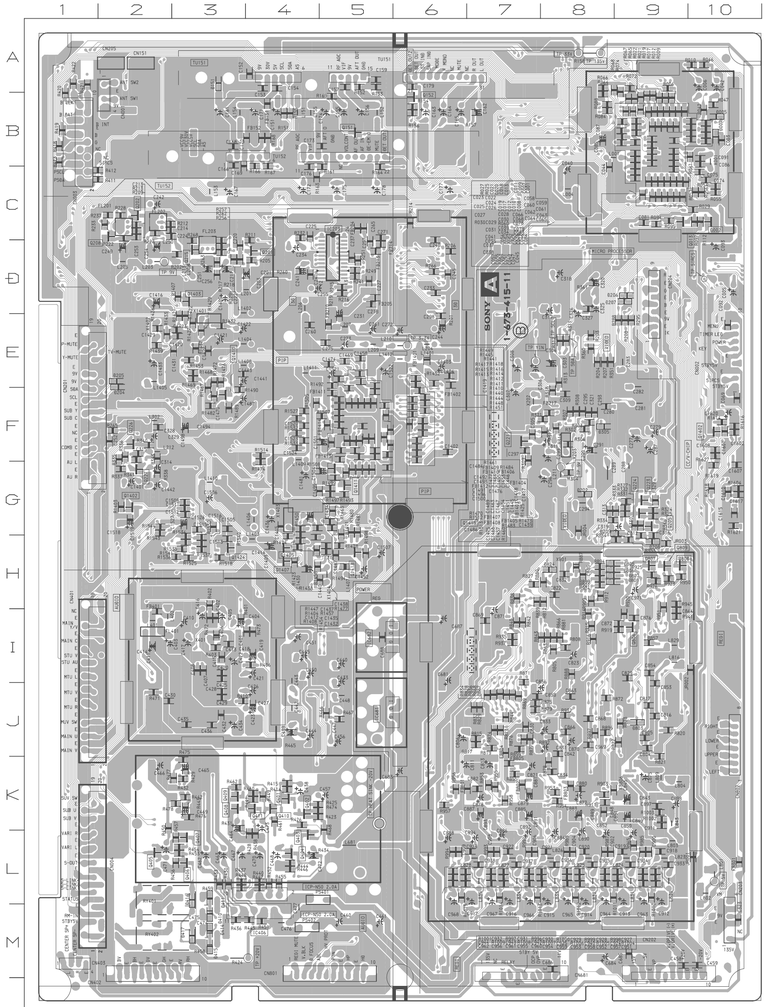


A (1/3) [TUNER, YCJ, SYSTEM CONTROL, AUDIO] **A (2/3)** [PJED, REGI-CORRECTION] **A (3/3)** [P IN P, 3D COMB FILTER]

– A Board –



< Component Side >



< Conductor Side >

A BOARD

DIODE

	L	R	*
D001	A-2		③
D002	A-2		③
D003	B-1		③
D004	F-1		③
D005		B-10	⑤
D006	E-1		③
D151		A-3	⑤
D201	D-6		③
D202		G-8	⑤
D204		E-2	③
D205		E-2	⑤
D206		D-9	⑤
D207		D-9	⑤
D208		G-9	⑤
D209		G-9	⑤
D301	D-3		③
D302	D-4		③
D303	D-4		③
D304	D-4		③
D305		F-8	⑤
D402	K-7		③
D403	K-7		③
D404	K-7		③
D405	K-7		③
D406	M-7		③
D407	K-7		③
D408	L-7		③
D409	L-9		③
D410		M-3	③
D411		L-3	③
D412	M-8		③
D413	M-7		③
D414		M-3	③
D415		M-3	③
D416		L-3	③
D417		M-3	③
D418	M-7		③
D420	K-8		③
D421	K-8		③
D801	J-2		③
D802	J-2		③
D803		J-9	③
D804	J-3		③
D805		H-8	⑤
D806		H-8	⑤
D807		H-8	⑤
D808		H-8	⑤
D809	K-3		③
D810	K-3		③
D816	K-1		③
D817	K-1		③
D818	J-1		③
D819	J-1		③
D820	J-1		③
D821	J-1		③
D822	J-1		③
D823	J-1		③
D824		H-8	⑤
D1407	H-8		③
D1408	H-9		③
D1409	H-8		③
D1410	H-8		③

TRANSISTOR

	L	R	*
Q001	A-2		②
Q002		C-10	⑩
Q003	A-9		②
Q004	A-1		②
Q005	A-9		②
Q006	E-1		②
Q007	B-4		②
Q008	C-1		②
Q009	C-1		②
Q010	E-2		②
Q011	C-2		②
Q012	C-2		②
Q013		C-9	①
Q014	E-2		②
Q015	E-1		②
Q016	E-2		②
Q017	E-2		②
Q018	E-1		②
Q019	E-1		②
Q020	F-1		②
Q021	F-1		②
Q022	F-2		②
Q023	F-2		②
Q024	B-4		②
Q151		B-5	①
Q152		B-6	①
Q153	C-5		②
Q201		D-4	①
Q202		C-2	①
Q203	C-9		②
Q204	D-8		②
Q205		G-9	①
Q206	D-8		②
Q207	D-8		②
Q208		C-2	①
Q209	C-10		②
Q210	D-8		②
Q211	C-9		②
Q212	D-8		②
Q213	D-10		②
Q214	D-9		②
Q215		D-3	①
Q216	D-8		②
Q217	G-3		②
Q218	E-2		②
Q219	E-2		②
Q220	E-2		②
Q221	F-7		①
Q222	F-4		②
Q223	G-9		①
Q224	G-9		①
Q225	G-3		②
Q226	F-2		①
Q227	G-2		①
Q228	F-9		②
Q229	D-2		②
Q230	F-2		②
Q231	F-2		②
Q232	E-3		②
Q301	D-3		②
Q302	D-3		②
Q303	D-3		②
Q304	E-3		②
Q401		K-4	①
Q402		K-4	①
Q403		L-4	①
Q404		L-4	①
Q405		L-2	①
Q406		L-3	①
Q407		L-3	①
Q408		K-3	①
Q409		K-3	①
Q410		K-4	①
Q411		K-4	①
Q801	I-2		②
Q802	I-2		②
Q803	J-2		②
Q804	I-2		②
Q805	J-2		②
Q806		I-9	①
Q807		H-9	①
Q808		H-9	①
Q809		H-9	①
Q1408	H-7		②
Q1409	E-8		②
Q1410		F-3	①
Q1411		G-5	①
Q1412	F-8		②
Q1413		H-5	①
Q1414	G-8		②
Q1415		G-5	①
Q1416	G-8		②
Q1417	G-6		②
Q1418	F-7		②
Q1419	F-7		②
Q1420	F-7		②
Q1422	F-7		②
Q1423	H-9		②
Q1424		H-3	①
Q1601	G-1		②
Q1602		F-10	①
Q1603	G-1		②

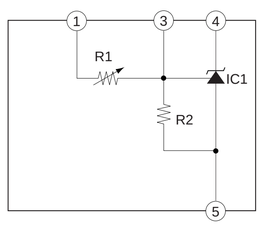
IC

	L	R
IC001	B-1	
IC002	B-2	
IC004	B-3	
IC202	D-5	
IC203		D-5
IC204	D-6	
IC205	E-7	
IC206	F-3	
IC401	J-8	
IC402		
IC403	J-7	
IC404	K-9	
IC406	M-7	L-4
IC681	J-6	J-5
IC682	I-6	I-5
IC801	I-4	
IC802	J-2	
IC803	J-4	
IC804	J-2	
IC805	H-3	
IC806	I-2	
IC807	K-3	
IC808	J-3	
IC809	J-3	
IC810	I-4	
IC811	I-4	
IC812	J-3	
IC814	H-2	
IC815	K-4	
IC816	K-4	
IC817	K-4	
IC818	K-2	
IC819	L-2	
IC820	L-3	
IC821	L-3	
IC822	L-4	
IC823	L-4	
IC824	L-5	
IC1401	F-5	
IC1402	E-9	
IC1403	H-7	
IC1404	F-8	
IC1405	F-6	
IC1406	G-6	
IC1407	G-8	
IC1408	G-8	
IC1409	H-9	
IC1410	G-9	
IC1412	G-6	
IC1601	F-1	
IC1602	G-1	

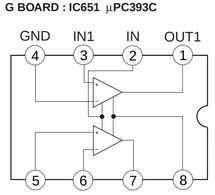
• G BOARD WAVEFORMS

① 18.5Vp-p (H)	② 12.5Vp-p (H)	③ 14.5Vp-p (H)
④ 17.7Vp-p (V)	⑤ 15.2Vp-p (H)	⑥ 14Vp-p (H)
⑦ 56.1Vp-p (V)	⑧ 1.72Vp-p (V)	⑨ 3.7Vp-p (V)
⑩ 108Vp-p (H)	⑪ 1.2kVp-p (H)	⑫ 130Vp-p (H)

G BOARD : IC654 DM-58

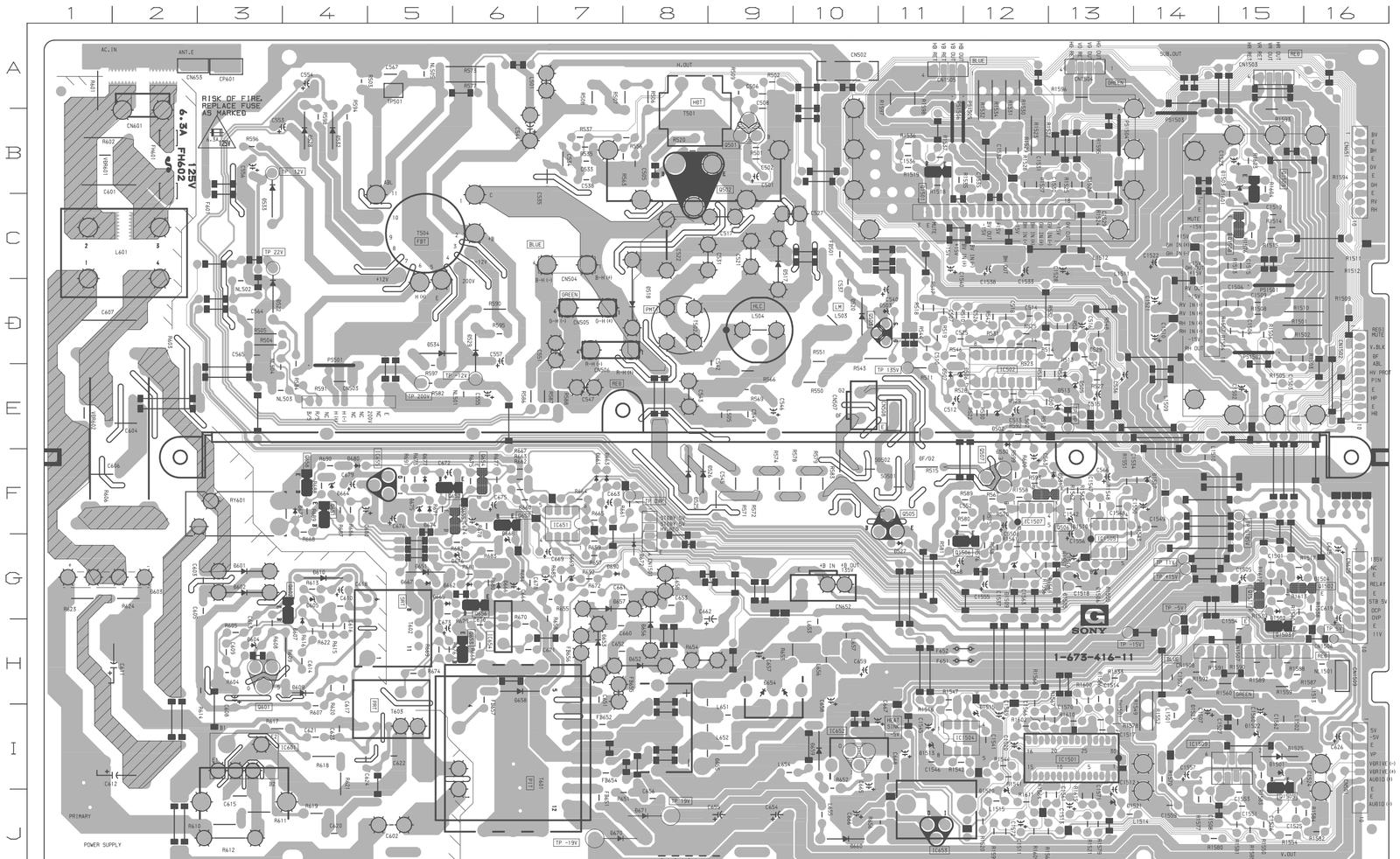


G BOARD : IC651 µPC393C



Schematic diagram
G board ➡

– G Board –



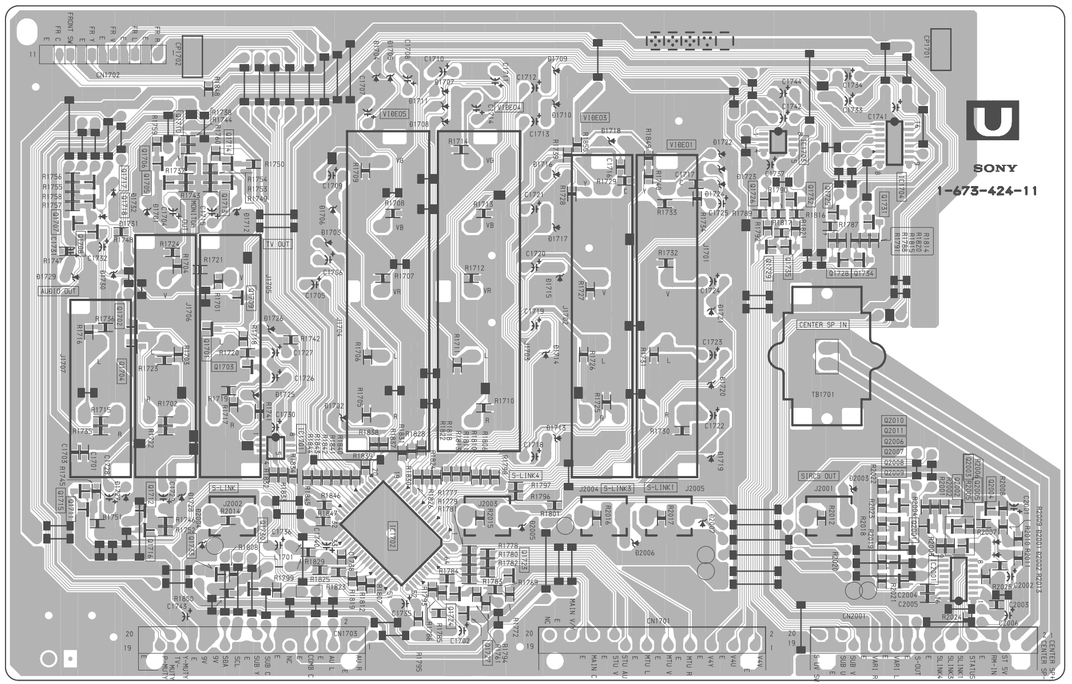
G BOARD

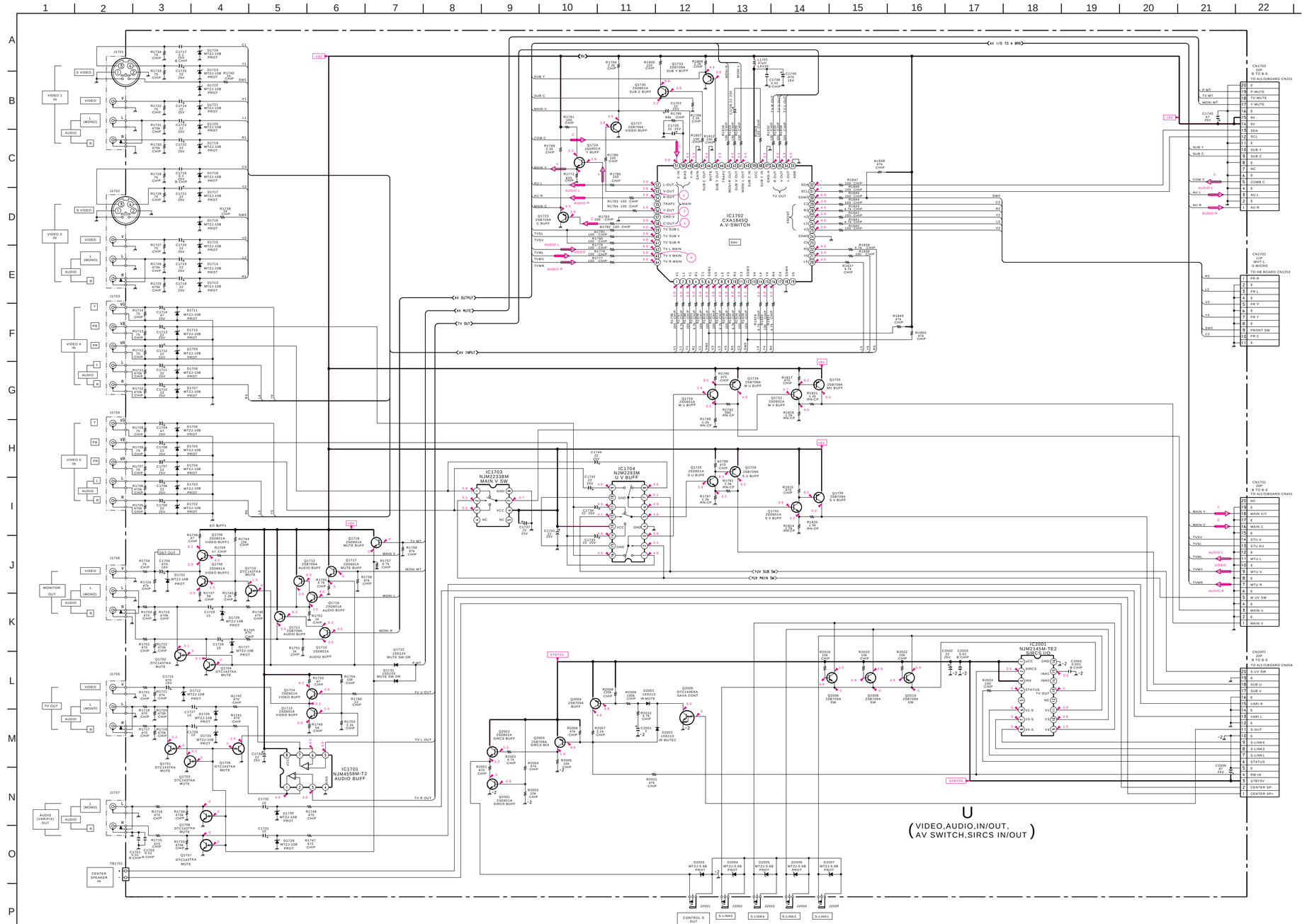
DIODE	
D501	E-13
D505	E-13
D506	E-11
D507	E-11
D513	E-13
D517	C-9
D518	D-8
D520	D-10
D522	D-3
D525	F-8
D526	F-8
D528	B-4
D529	D-6
D530	E-12
D531	F-13
D532	B-4
D533	B-6
D534	D-5
D601	G-3
D602	G-3
D603	G-2
D604	H-3
D605	G-4
D607	H-4
D609	H-4
D610	G-4
D651	G-5
D652	H-8
D653	H-7
D654	H-9
D655	I-8
D656	H-8
D657	G-7
D658	H-6
D659	I-10
D660	J-10
D661	F-7
D662	G-6
D663	F-7
D664	F-4
D665	G-5
D666	G-6
D667	G-5
D668	G-6
D669	G-7
D670	J-7
D671	J-8
D673	F-4
D674	F-5
D675	F-5
D676	G-6
D677	F-5
D680	F-4
D1501	I-15
D1503	B-15
D1504	G-15
D1505	G-13
D1506	G-13
D1507	F-14
D1509	G-12
D1510	F-13
D1513	I-11
D1515	I-12
D1520	J-12
D1521	J-13
D1522	I-15
D1523	H-14
D1525	I-15

TRANSISTOR	
Q501	B-9
Q502	B-8
Q503	D-11
Q505	F-11
Q506	F-12
Q507	F-12
Q601	H-3
Q602	G-4
Q651	F-4
Q652	F-5
Q653	H-6
Q654	F-6
Q655	F-5
Q656	G-6
Q657	F-6
Q658	F-4
Q1501	B-11
Q1502	G-15
Q1503	H-15
Q1505	I-15
Q1506	G-11
Q1508	C-15
Q1509	B-15
Q1511	G-15

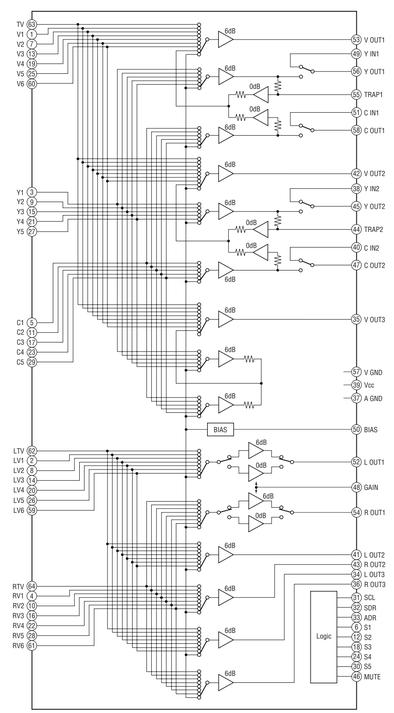
IC	
IC502	E-12
IC601	I-3
IC651	F-7
IC652	I-10
IC653	J-11
IC654	H-6
IC655	F-5
IC1501	I-13
IC1502	D-14
IC1504	I-11
IC1505	G-13
IC1506	C-12
IC1507	F-12
IC1509	I-15

– U Board –

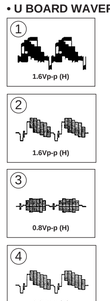

U
SONY
1-673-424-11
CENTER SP IN
TB1701
SIRCS OUT
S-LINK1
S-LINK2
S-LINK3
S-LINK4
VIDEO1
VIDEO2
VIDEO3
VIDEO4
VIDEO5
TV OUT
AUDIO OUT
IC1701
IC2001
IC2002
CN1701
CN1702
CN1703
CN2001
CN2002

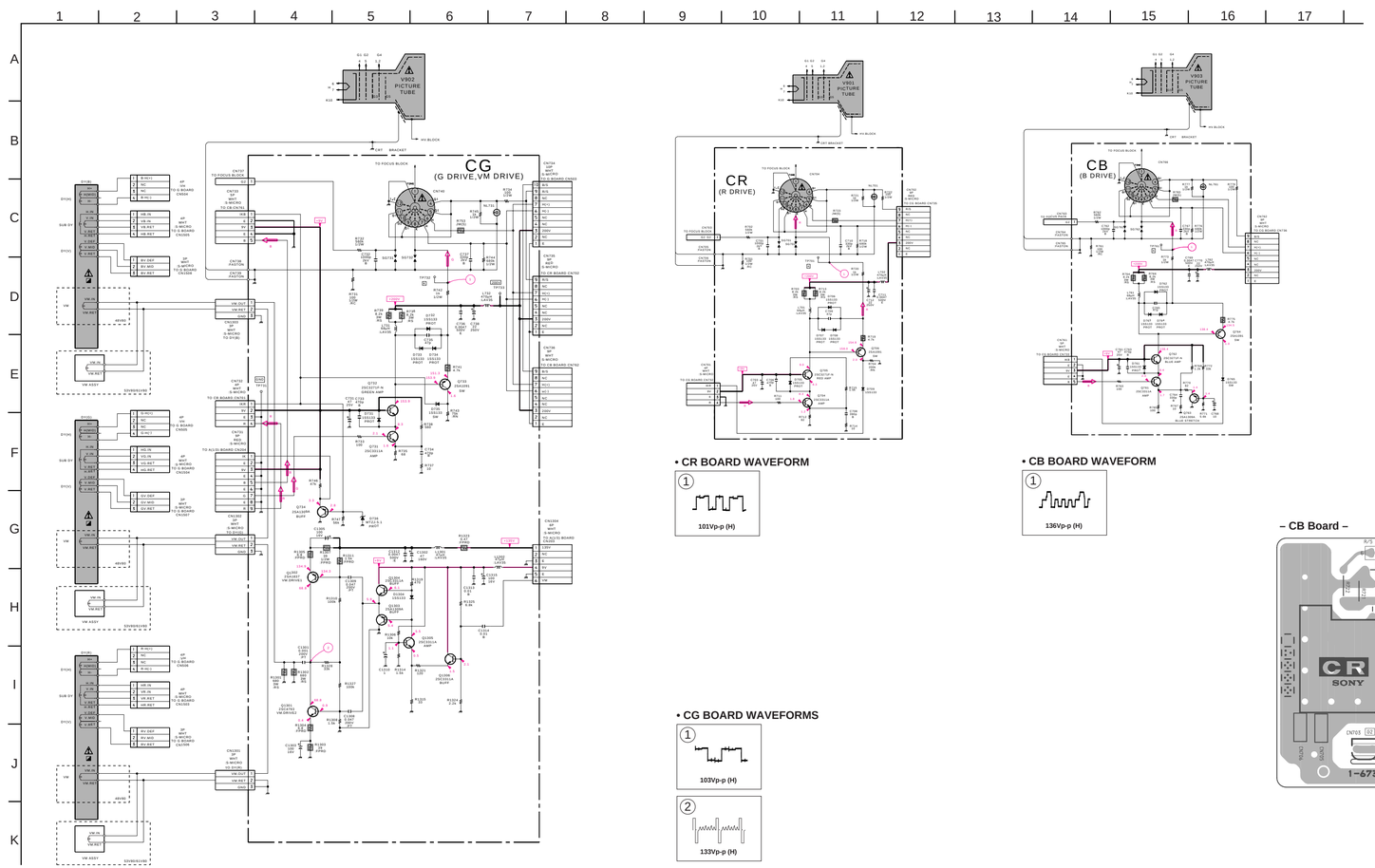


U BOARD : IC1702 CXA1845Q



• U BOARD WAVEFORMS





• CR BOARD WAVEFORM

① 101Vp-p (H)

• CG BOARD WAVEFORMS

① 103Vp-p (H)

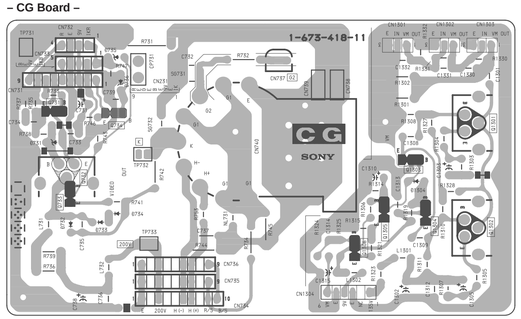
② 133Vp-p (H)

• CB BOARD WAVEFORM

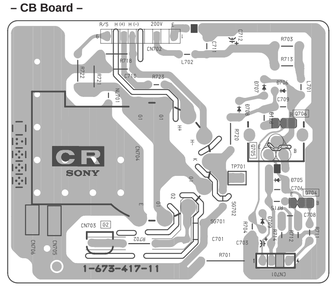
① 136Vp-p (H)

CG [G DRIVE, VM DRIVE] **CR** [R DRIVE] **CB** [B DRIVE]

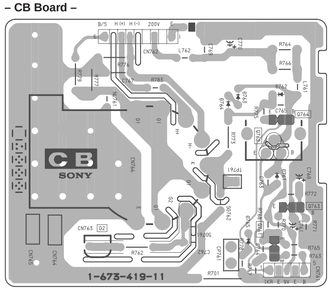
– CG Board –

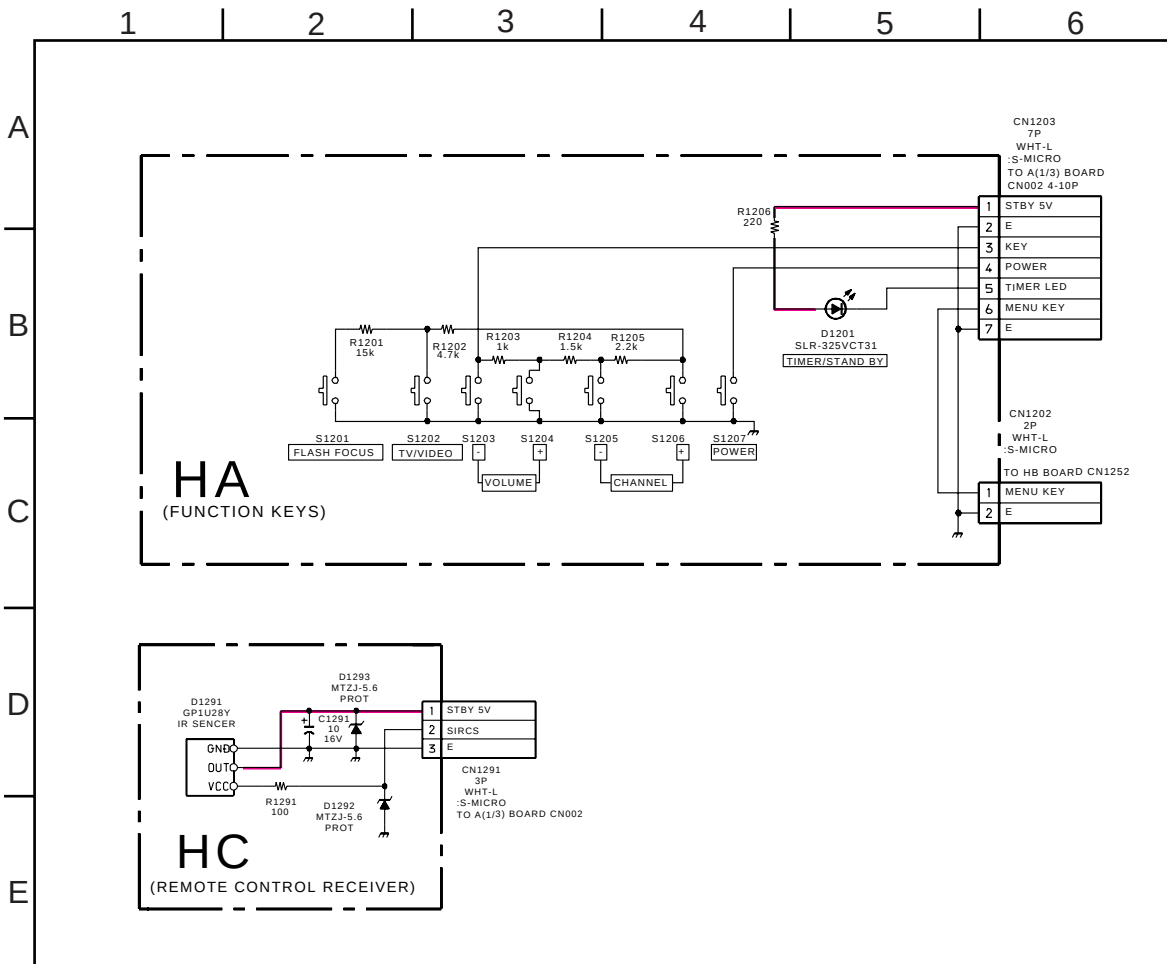


– CB Board –



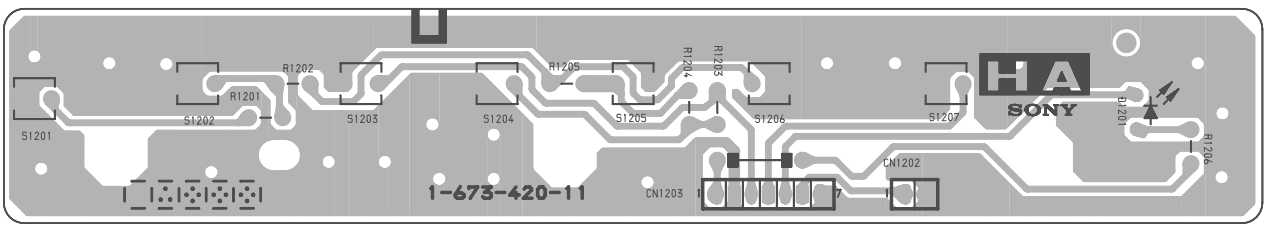
– CB Board –



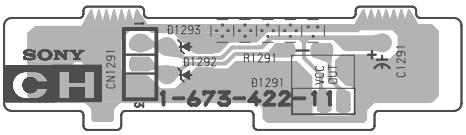


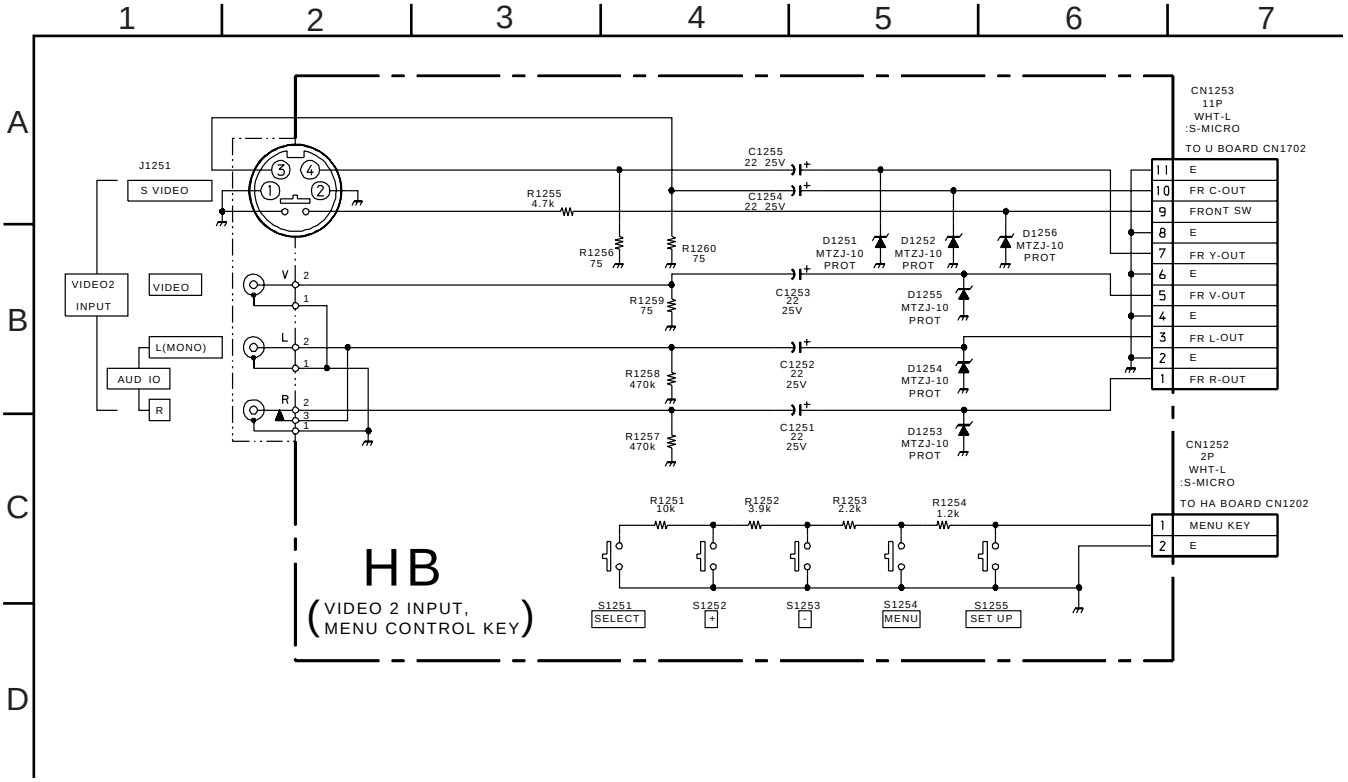
HA [FUNCTION KEK] **HC** [RIMOTE CONTROL RECEIVER]

– HA Board –



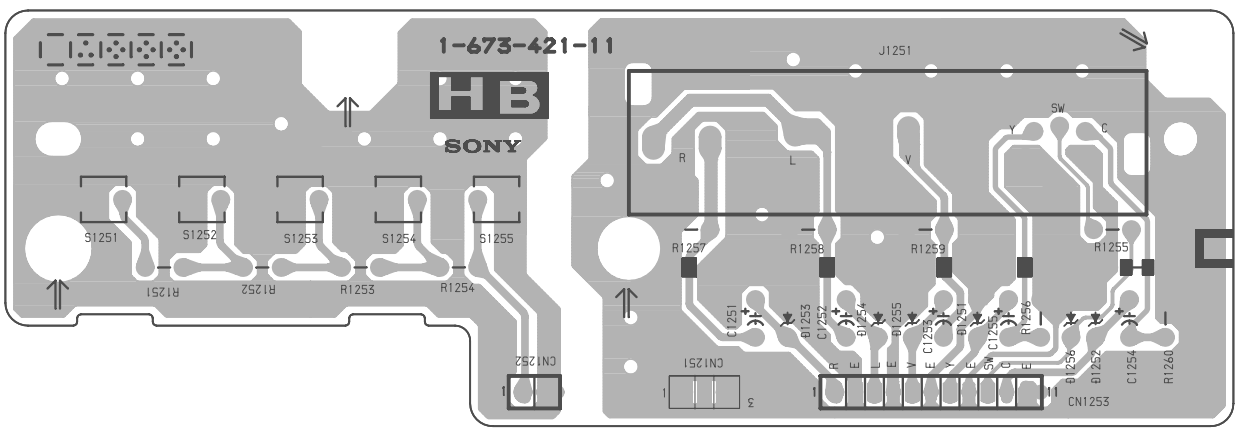
– HC Board –





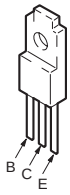
HB [VIDEO-2 INPUT, MENU CONTROL KEYS]

– HB Board –

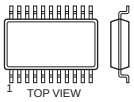


6-5. SEMICONDUCTORS

BA05T

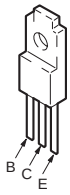


BH3868FS-E2



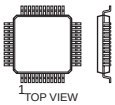
32pin

BU4053BCF-T2
CXA1315M
NJM2145M-TE2
SN74HC153ANS
UPD6376GS-E2



16pin

CM0006CF

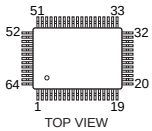


80pin

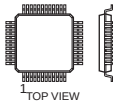
CXA1726AS

30pin

CXA1845Q
CXA2147Q
CXP750010-009Q
CXP86324-021Q

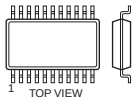


CXA2019AQ-T4



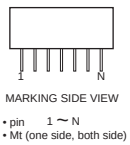
40pin

CXA2039M-T6

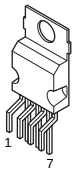


24pin

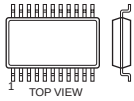
DM-58



LA78045



M24C08-MN6T
NJM2533M(TE2)
ST24E16FM6TR
TC7W66FU(TE12R)
UPC4558G2
UPC4570G2

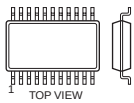


8pin

M5218AP
UPC393C

8pin

MC74HC04AF
MC74HC32AF
NJM2058M-TE2
TC74HC08AF(EL)
TLC2932IPW

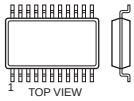


14pin

MSM514265C-60JSDR1

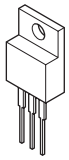
40pin

NJM2283M-TE1

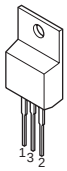


16pin

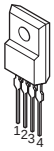
NJM7805FA



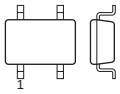
NJM7905FA



PQ09RD11

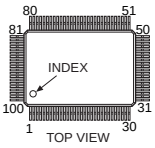


PST9143NL

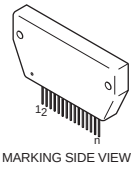


5pin

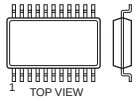
SAB9076H/N4
TC9447F-003
UPD64081BGF-3BA



STK392-150

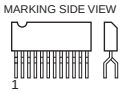


TC528257J-80(EL)



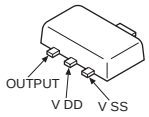
40pin

TDA7265



11pin

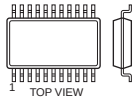
UPC2933T-E2



UPC339C

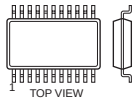
14pin

UPC659AGS-E2



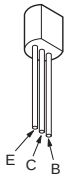
24pin

Z8613012SSC-00TR

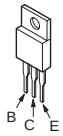


18pin

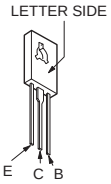
2SA1091-O



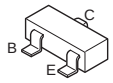
2SA1837
2SC4793
IRF614



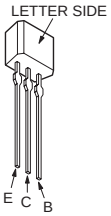
2SC2611
2SC2688-(5)LK



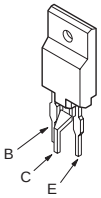
2SA1162-G
2SD601A-Q
DTA144EKA-T146
DTC143TKA-T146



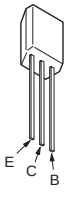
2SA1175-HFE
2SC2785-HFE



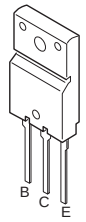
2SC5022-02



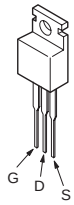
2SD2144S-UVW
2SD2144S-V



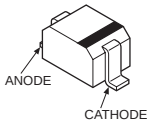
2SD2578-RF



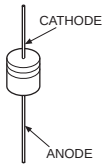
2SK2663



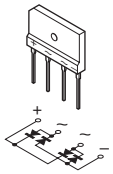
1SS355TE-17
DTZ10B
DTZ33B
DTZ4.7C
UDZ-TE-17-22B
UDZS-TE17-5.6B



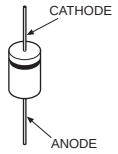
D1N20R
D2L20U
MTZJ-10B
MTZJ-13
MTZJ-2.7A
MTZJ-4.7C
MTZJ-7.5B
MTZJ-T-77-24
MTZJ-T-77-5.6B
RD10ES-B2
RD15ES-B2
RD18ESB2
RD24ES-B1
RD3.9ES-B2
RD5.1ES-B1
RD5.1ESB2
RD5.6ES-B2
RD6.2ESB2
RD8.2ES-B2



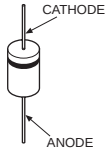
D4SBS4-F



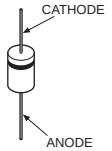
D1NL20U



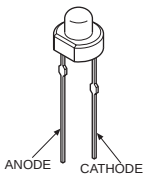
D1NS6
EGP20G
EL1Z
GP08D
RGP02-20EL-6394



D3S6M-F
ERA22-08
ERC04-06SE
ERC06-15S



SLR-325VCT31



SECTION 7
EXPLODED VIEWS

NOTE:

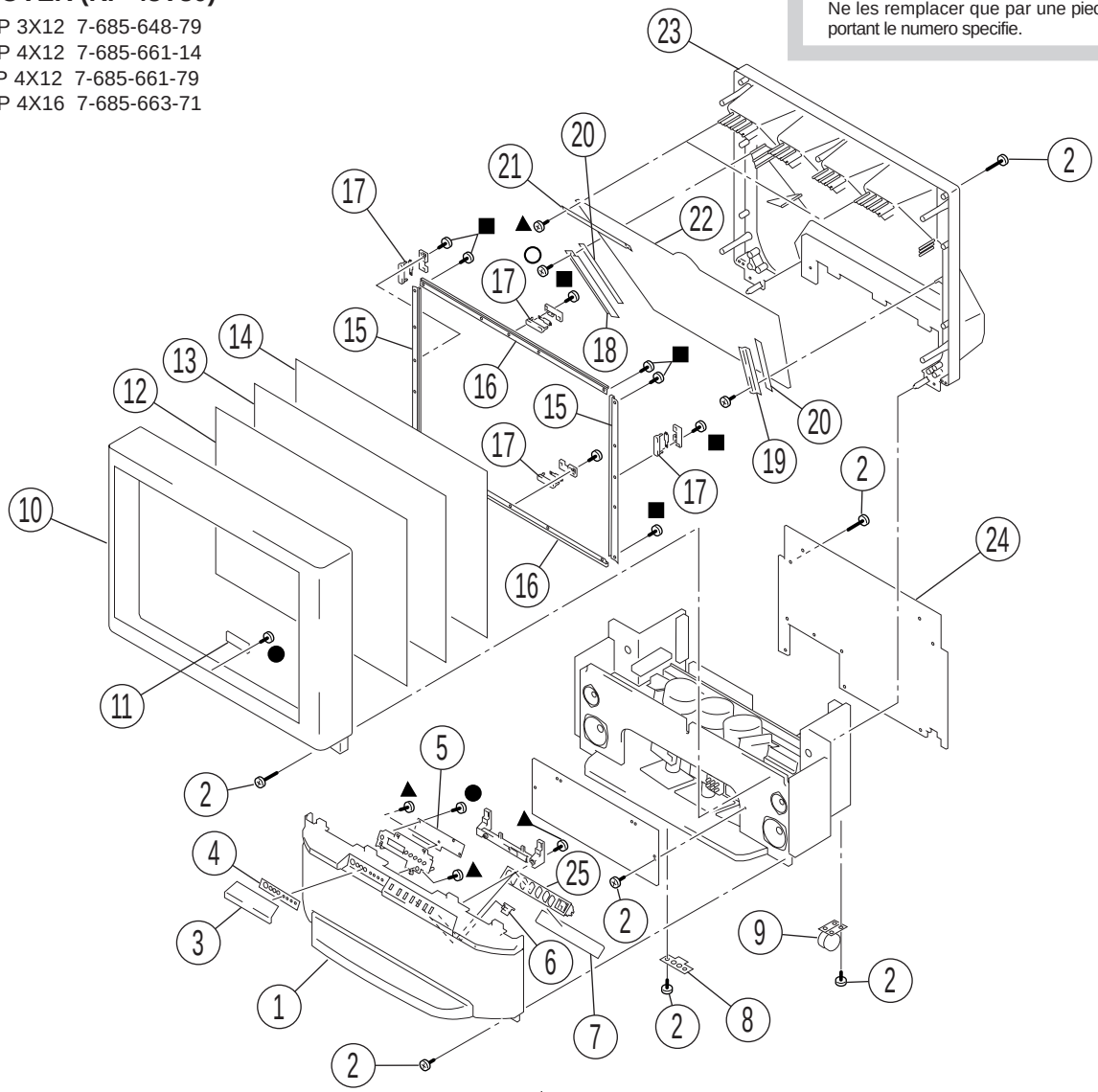
- Items with no part number and no description are not stocked because they are seldom required for routine service
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark ⚠ are critial for safety.
Replace only with part number specified.

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite.
Ne les remplacer que par une piece portant le numero specifie.

7-1. COVER (KP-48V80)

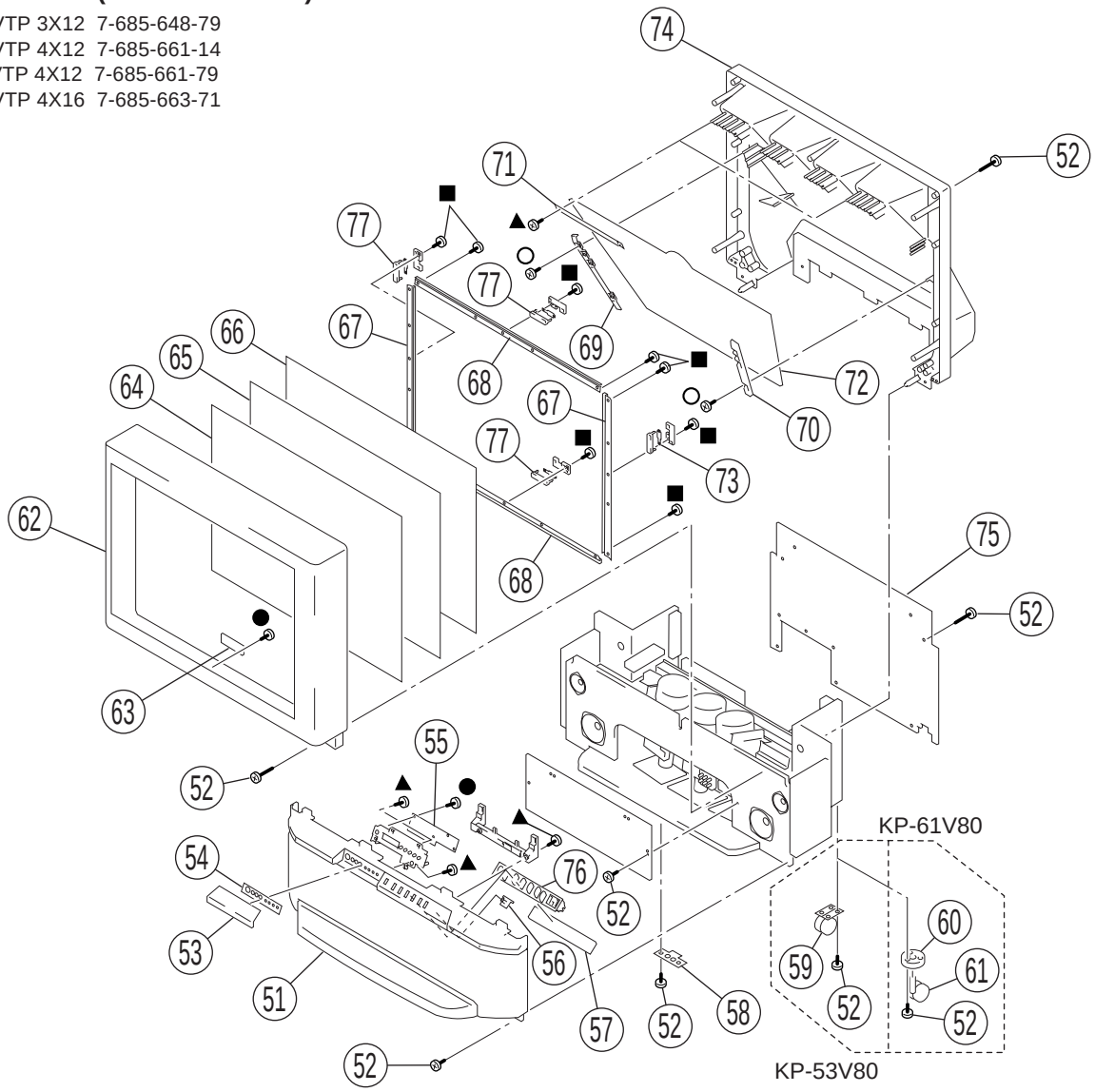
● : +BVTP 3X12 7-685-648-79
■ : +BVTP 4X12 7-685-661-14
▲ : +BVTP 4X12 7-685-661-79
○ : +BVTP 4X16 7-685-663-71



REF. NO.		PART NO.	DESCRIPTION	REMARK
1		X-4036-837-1	GRILLE (48V) ASSY, SPEAKER	
2		4-041-164-11	SCREW (4X20), TAPPING	
3		4-069-671-11	DOOR (V), CONTROL	
4		4-069-715-01	LABEL, CONTROL	
5	*	A-1372-620-A	HB BOARD, COMPLETE	
6		4-069-682-01	GUIDE, LED	
7	*	A-1372-619-A	HA BOARD, COMPLETE	
8		4-048-175-01	FOOT, PLASTIC	
9		4-040-755-01	CASTER (DIA. 30)	
10		X-4036-838-1	BEZNET ASSY (48V)	
11	*	A-1372-618-A	HC BOARD, COMPLETE	
12		4-064-651-11	SCREEN (48), CONTRAST	
13		4-058-455-12	PLATE (F), DIFFUSION	
14		4-070-235-11	PLATE (L), DIFFUSION	
15	*	4-070-336-11	HOLDER, SCREEN (YC)	
16	*	4-070-336-41	HOLDER, SCREEN (YC)	
17	*	A-1390-933-A	S BOARD, COMPLETE	
18	*	4-051-790-02	HOLDER, MIRSD (L)	
19	*	4-051-789-02	HOLDER, MIRSD (R)	
20	*	4-049-098-01	CUSHION	
21	*	4-070-345-21	HOLDER (TOP), MIRROR	
22		4-071-048-01	MIRROR (48), REFLECTION	
23	*	4-057-610-01	COVER, MIRROR	
24	*	4-071-126-01	BOARD, REAR (48)	(48V80)
25		4-069-681-01	BUTTON, MULTI	

7-2. COVER (KP-53V80/61V80)

● : +BVTP 3X12 7-685-648-79
■ : +BVTP 4X12 7-685-661-14
▲ : +BVTP 4X12 7-685-661-79
○ : +BVTP 4X16 7-685-663-71



REF. NO.		PART NO.	DESCRIPTION	REMARK
51		X-4036-806-1	GRILLE ASSY, SPEAKER	(61V80)
		X-4036-808-1	GRILLE ASSY, SPAKER	(53V80)
52		4-041-164-11	SCREW (4X20), TAPPING	
53		4-069-671-11	DOOR (V), CONTROL	
54		4-069-715-01	LABEL, CONTROL	
55	*	A-1372-620-A	HB BOARD, COMPLETE	
56		4-069-682-01	GUIDE, LED	
57	*	A-1372-619-A	HA BOARD, COMPLETE	
58		4-048-175-01	FOOT, PLASTIC	
59		4-040-755-01	CASTER (DIA. 30)	(53V80)
60		4-030-850-03	SOCKET, CASTER	(61V80)
61		4-061-174-01	CASTER	(61V80)
62		X-4036-807-1	BEZNET ASSY	(61V80)
		X-4036-809-1	BEZNET ASSY (53V)	(53V80)
63	*	A-1372-618-A	HC BOARD, COMPLETE	
64		4-058-538-11	SCREEN (61), CONTRAST	(61V80)
		4-058-894-11	SCREEN (53), CONTRAST	(53V80)
65		4-066-082-11	PLATE (F), DIFFUSION	(61V80)
		4-070-602-11	PLATE (F), DIFFUSION	(53V80)

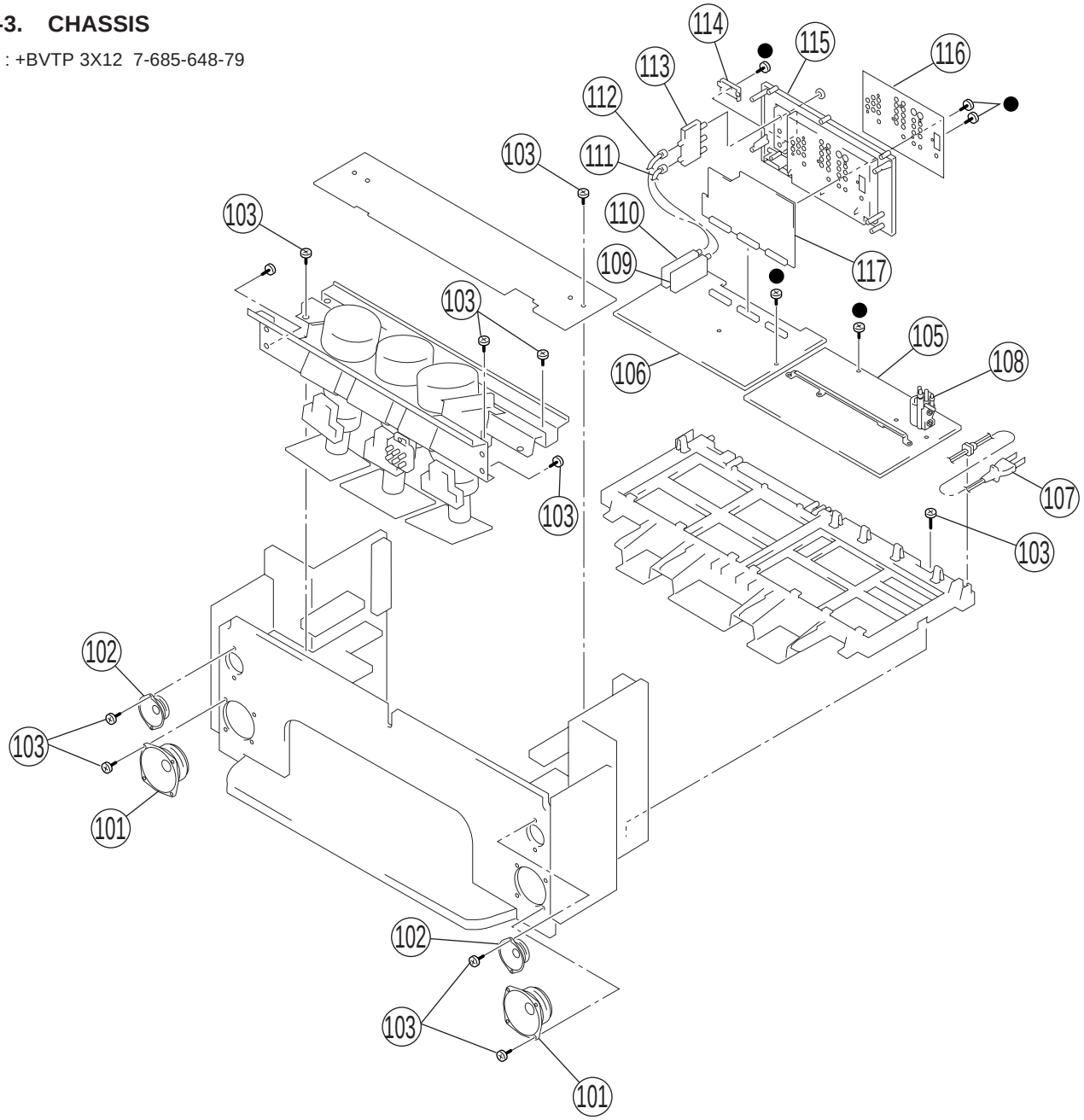
REF. NO.		PART NO.	DESCRIPTION	REMARK
66		4-064-343-11	PLATE (L), DUFFUSION	(53V80)
		4-070-283-11	PLATE (L), DIFFUSION	(61V80)
67	*	4-070-330-01	HOLDER (S), SCREEN (YC)	(53V80)
	*	4-070-334-01	HOLDER (S), SCREEN (YC)	(61V80)
68	*	4-070-328-11	HOLDER (L), SCREEN (YC)	(53V80)
	*	4-070-329-01	HOLDER (L), SCREEN (YC)	(61V80)
69	*	4-069-687-01	HOLDER (LS), MIRROR	(53V80)
	*	4-069-689-01	HOLDER (L), MIRROR	(61V80)
70	*	4-069-688-01	HOLDER (RS), MIRROR	(53V80)
	*	4-069-690-01	HOLDER (R), MIRROR	(61V80)
71	*	4-070-345-01	HOLDER (TOP), MIRROR	(61V80)
	*	4-070-345-11	HOLDER (TOP), MIRROR	(53V80)
72		4-070-344-01	MIRROR, REFLECTION	(53V80)
		4-070-922-01	MIRROR, REFELECTION	(61V80)
77	*	A-1390-933-A	S BOARD, COMPLETE	
74	*	4-069-694-01	COVER, MIRROR	(53V80)
	*	4-069-695-01	COVER, MIRROR	(61V80)
75	*	4-070-342-01	BOARD (53), REAR	(53V80)
	*	4-070-920-01	BOARD, REAR	(61V80)
76		4-069-681-01	BUTTON, MULTI	

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

7-3. CHASSIS

■ : +BVTP 3X12 7-685-648-79



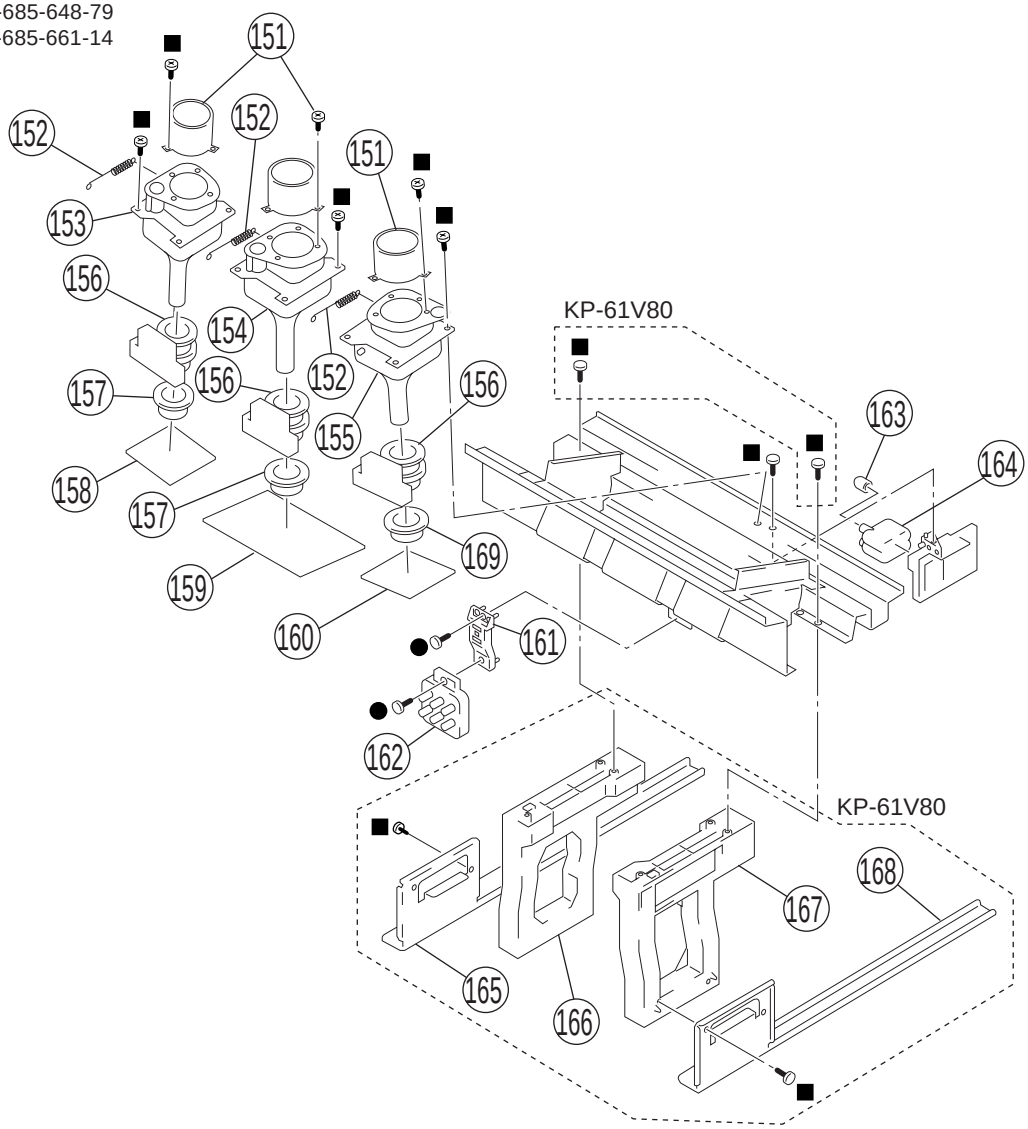
REF. NO.		PART NO.	DESCRIPTION	REMARK
101		1-529-401-11	SPEAKER (13cm)	(48/53V80)
		1-529-402-11	SPEAKER (16cm)	(61V80)
102		1-529-403-21	SPEAKER (6.6cm)	
103		4-378-522-31	SCREW (4X20), TAPPING	
105	*	A-1316-437-A	G BOARD, COMPLETE	(53V80)
105	*	A-1316-471-A	G BOARD, COMPLETE	(48/61V80)
106	*	A-1298-843-A	A BOARD, COMPLETE	
107	⚠	1-790-130-11	CORD, AC POWER(WITH CONNECTOR)	
108	⚠	X-4560-164-1	FLAY BACK TRANS ASSY, NX4007//J114(T504)	
109		8-598-430-00	TUNER, FSS BTF-FA401 (TU152)	
110		8-598-431-20	TUNER, FSS BTF-WA411 (TU151)	
111	*	1-557-056-31	CABLE, P-P	
112		1-556-945-21	CABLE, P-P	
113		8-598-414-20	CHANGER, ANTENNA AS-2F	
114		4-069-675-01	CAP, TERMINAL BOARD	(48V80)
115		4-069-674-01	TERMINAL BOARD	
116		4-069-661-01	LABEL, TERMINAL	
117	*	A-1373-727-A	U BOARD, COMPLETE	

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

7-4. PICTURE TUBE

● : +BVTP 3X12 7-685-648-79
■ : +BVTP 4X12 7-685-661-14



REF. NO.	PART NO.	DESCRIPTION	REMARK
151	4-056-258-11	LENS (DELTA 78)	(48/61V80)
	4-040-131-21	LENS (LINNIT POINT 6)	(61V80)
152	4-057-007-01	SPRING, TENSION	(53/61V80)
153	⚠ 8-733-572-05	CRT 07MXC3(R)(HEATER)	(48V80)
	⚠ A-1501-278-	ACOUPLER (R) ASSY, CRT	(53V80)
	⚠ A-1501-521-	ACOUPLER (R) ASSY, CRT	(61V80)
154	⚠ 8-733-570-05	CRT 07MXC2(G)(HEATER)	(48V80)
	⚠ A-1501-279-	ACOUPLER (G) ASSY, CRT	(53V80)
	⚠ A-1501-522-	ACOUPLER ASSY, CRT (G)	(61V80)
155	⚠ 8-733-575-05	CRT 07MAC3(B)(HEATER)	(48V80)
	⚠ A-1501-277-	ACOUPLER (B) ASSY, CRT	(53V80)
	⚠ A-1501-520-	ACOUPLER (B) ASSY, CRT	(61V80)
156	⚠ 1-451-497-21	DEFLECTION YOKE	(53/61V80)
	⚠ 1-451-496-11	DEFLECTION YOKE	(48V80)
157	⚠ 1-451-469-21	COIL ASSY, VM	(53/61V80)
	⚠ 1-452-790-21	NECK ASSY	(48V80)
158	* A-1331-922-A	CR BOARD, COMPLETE	
159	* A-1331-923-A	CG BOARD, COMPLETE	
160	* A-1331-924-A	CB BOARD, COMPLETE	
161	* 4-063-403-01	BRACKET, FOCUS PACK	
162	⚠ 1-223-925-11	RESISTOR ASSY (FOCUS PACK)	
163	4-373-137-01	CAP (Z), RUBBER	
164	⚠ 8-598-955-30	BLOCK ASSY, HIGH-VOLTAGE	
165	4-070-917-01	STAY (L), CHASSIS	(61V80)
166	4-069-677-01	BOARD (L), SIDE	(61V80)
167	4-069-678-01	BOARD (R), SIDE	(61V80)
168	4-070-916-01	STAY (R), CHASSIS	(61V80)
169	⚠ 1-451-469-21	COIL ASSY, VM	(53/61V80)
	⚠ 1-452-909-31	MAGNET ASSY, 4 POLE	(48V80)

SECTION 8
ELECTRICAL PARTS LIST

A

NOTE:

The components identified by shading and mark ⚠ are critial for safety.
Replace only with part number specified.

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite.
Ne les remplacer que par une piece portant le numero specifie.

When indicating parts by reference number, please include the board name.

- The components identified by ⋈ in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

RESISTORS
- All resistors are in ohms
- F : nonflammable

- CAPACITORS
  MF : μ F, PF : μμ F
- COILS
  MMH : m H, UH : μH
- There are some cases the reference number on one board overlaps on the other board. Therefore, when ordering parts by the reference number, please include the board name.

REF. NO.	PART NO.	DESCRIPTION			REMARK
	* A-1298-843-A	A BOARD, COMPLETE			
		**********			
	4-382-854-11	SCREW(M3X10), P, SW (+)			
		<CAPACITOR>			
C002	1-163-259-91	CERAMIC CHIP	220PF	5% 50V	
C003	1-163-038-91	CERAMIC CHIP	0.1MF	25V	
C004	1-163-809-11	CERAMIC CHIP	0.047MF	10% 25V	
C005	1-126-935-11	ELECT	470MF	20% 6.3V	
C006	1-126-960-11	ELECT	1MF	20% 50V	
C015	1-163-259-91	CERAMIC CHIP	220PF	5% 50V	
C016	1-163-809-11	CERAMIC CHIP	0.047MF	10% 25V	
C039	1-163-021-91	CERAMIC CHIP	0.01MF	10% 50V	
C040	1-126-916-11	ELECT	1000MF	20% 6.3V	
C041	1-163-229-11	CERAMIC CHIP	12PF	5% 50V	
C042	1-126-960-11	ELECT	1MF	20% 50V	
C044	1-163-231-11	CERAMIC CHIP	15PF	5% 50V	
C066	1-117-720-11	CERAMIC CHIP	4.7MF	10V	
C072	1-163-021-91	CERAMIC CHIP	0.01MF	10% 50V	
C080	1-163-227-11	CERAMIC CHIP	10PF	0.5PF 50V	
C081	1-163-227-11	CERAMIC CHIP	10PF	0.5PF 50V	
C082	1-163-227-11	CERAMIC CHIP	10PF	0.5PF 50V	
C085	1-163-021-91	CERAMIC CHIP	0.01MF	10% 50V	
C086	1-163-227-11	CERAMIC CHIP	10PF	0.5PF 50V	
C087	1-104-664-11	ELECT	47MF	20% 25V	
C091	1-163-229-11	CERAMIC CHIP	12PF	5% 50V	
C093	1-126-933-11	ELECT	100MF	20% 16V	
C094	1-164-004-11	CERAMIC CHIP	0.1MF	10% 25V	
C098	1-163-227-11	CERAMIC CHIP	10PF	0.5PF 50V	
C099	1-163-227-11	CERAMIC CHIP	10PF	0.5PF 50V	
C100	1-163-227-11	CERAMIC CHIP	10PF	0.5PF 50V	
C102	1-163-239-11	CERAMIC CHIP	33PF	5% 50V	
C103	1-163-239-11	CERAMIC CHIP	33PF	5% 50V	
C104	1-163-227-11	CERAMIC CHIP	10PF	0.5PF 50V	
C105	1-163-227-11	CERAMIC CHIP	10PF	0.5PF 50V	
C106	1-163-227-11	CERAMIC CHIP	10PF	0.5PF 50V	
C151	1-126-935-11	ELECT	470MF	20% 16V	
C152	1-163-021-91	CERAMIC CHIP	0.01MF	10% 50V	
C153	1-163-021-91	CERAMIC CHIP	0.01MF	10% 50V	
C154	1-163-021-91	CERAMIC CHIP	0.01MF	10% 50V	
C155	1-126-964-11	ELECT	10MF	20% 50V	
C156	1-126-933-11	ELECT	100MF	20% 16V	
C157	1-163-021-91	CERAMIC CHIP	0.01MF	10% 50V	
C159	1-164-161-11	CERAMIC CHIP	0.0022MF	10% 50V	
C161	1-126-968-11	ELECT	100MF	20% 50V	
C162	1-126-960-11	ELECT	1MF	20% 50V	
C163	1-128-551-11	ELECT	22MF	20% 25V	
C164	1-128-551-11	ELECT	22MF	20% 25V	
C165	1-128-551-11	ELECT	22MF	20% 25V	
C166	1-163-021-91	CERAMIC CHIP	0.01MF	10% 50V	
C167	1-126-935-11	ELECT	470MF	20% 16V	
C168	1-163-021-91	CERAMIC CHIP	0.01MF	10% 50V	
C170	1-163-021-91	CERAMIC CHIP	0.01MF	10% 50V	
C171	1-126-933-11	ELECT	100MF	20% 16V	
C172	1-126-964-11	ELECT	10MF	20% 50V	
C173	1-163-021-91	CERAMIC CHIP	0.01MF	10% 50V	
C174	1-126-933-11	ELECT	100MF	20% 16V	
C175	1-128-551-11	ELECT	22MF	20% 25V	
C176	1-164-161-11	CERAMIC CHIP	0.0022MF	10% 50V	
C177	1-128-551-11	ELECT	22MF	20% 25V	
C178	1-126-960-11	ELECT	1MF	20% 50V	
C179	1-163-021-91	CERAMIC CHIP	0.01MF	10% 50V	
C180	1-163-021-91	CERAMIC CHIP	0.01MF	10% 50V	
C201	1-104-664-11	ELECT	47MF	20% 25V	
C202	1-163-249-11	CERAMIC CHIP	82PF	5% 50V	
C203	1-163-038-91	CERAMIC CHIP	0.1MF	25V	
C205	1-163-038-91	CERAMIC CHIP	0.1MF	25V	
C209	1-163-038-91	CERAMIC CHIP	0.1MF	25V	
C210	1-163-038-91	CERAMIC CHIP	0.1MF	25V	
C211	1-128-551-11	ELECT	22MF	20% 25V	
C213	1-163-231-11	CERAMIC CHIP	15PF	5% 50V	
C214	1-163-231-11	CERAMIC CHIP	15PF	5% 50V	
C216	1-163-021-91	CERAMIC CHIP	0.01MF	10% 50V	
C218	1-163-038-91	CERAMIC CHIP	0.1MF	25V	
C220	1-163-133-00	CERAMIC CHIP	470PF	5% 50V	
C221	1-104-760-11	CERAMIC CHIP	0.047MF	10% 50V	
C222	1-109-982-11	CERAMIC CHIP	1MF	10% 10V	
C224	1-163-245-11	CERAMIC CHIP	56PF	5% 50V	
C227	1-163-038-91	CERAMIC CHIP	0.1MF	25V	
C228	1-163-038-91	CERAMIC CHIP	0.1MF	25V	
C231	1-126-933-11	ELECT	100MF	20% 16V	
C232	1-163-038-91	CERAMIC CHIP	0.1MF	25V	
C233	1-165-319-11	CERAMIC CHIP	0.1MF	50V	
C234	1-126-964-11	ELECT	10MF	20% 50V	
C235	1-163-038-91	CERAMIC CHIP	0.1MF	25V	

A

REF. NO.	PART NO.	DESCRIPTION			REMARK
C236	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C237	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C240	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C241	1-126-964-11	ELECT	10MF	20%	50V
C242	1-128-551-11	ELECT	22MF	20%	25V
C243	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C244	1-104-664-11	ELECT	47MF	20%	25V
C245	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C247	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C248	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C249	1-104-664-11	ELECT	47MF	20%	25V
C250	1-104-664-11	ELECT	47MF	20%	25V
C251	1-104-664-11	ELECT	47MF	20%	25V
C252	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C253	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C254	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C255	1-126-933-11	ELECT	100MF	20%	16V
C256	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C257	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C258	1-163-231-11	CERAMIC CHIP	15PF	5%	50V
C259	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C260	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C261	1-126-933-11	ELECT	100MF	20%	16V
C263	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C264	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C265	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C266	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C268	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C271	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C272	1-126-933-11	ELECT	100MF	20%	16V
C273	1-126-935-11	ELECT	470MF	20%	6.3V
C274	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C275	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C276	1-163-275-11	CERAMIC CHIP	0.001MF	5%	50V
C277	1-126-959-11	ELECT	0.47MF	20%	50V
C279	1-126-959-11	ELECT	0.47MF	20%	50V
C280	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C281	1-130-495-00	FILM	0.1MF	5%	50V
C282	1-130-495-00	FILM	0.1MF	5%	50V
C283	1-130-495-00	FILM	0.1MF	5%	50V
C284	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C285	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C286	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C287	1-126-964-11	ELECT	10MF	20%	50V
C288	1-130-495-00	MYLAR	0.1MF	5%	50V
C289	1-137-581-11	FILM	0.1MF	5%	100V
C290	1-126-935-11	ELECT	470MF	20%	16V
C291	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C293	1-164-182-11	CERAMIC CHIP	0.0033MF	10%	50V
C294	1-130-495-00	FILM	0.1MF	5%	50V
C296	1-126-961-11	ELECT	2.2MF	20%	50V
C297	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C298	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C299	1-126-959-11	ELECT	0.47MF	20%	50V
C300	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C301	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C302	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V

REF. NO.	PART NO.	DESCRIPTION			REMARK
C303	1-126-933-11	ELECT	100MF	20%	16V
C304	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C305	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C306	1-126-959-11	ELECT	0.47MF	20%	50V
C307	1-126-959-11	ELECT	0.47MF	20%	50V
C308	1-126-963-11	ELECT	4.7MF	20%	50V
C309	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C310	1-163-229-11	CERAMIC CHIP	12PF	5%	50V
C311	1-126-960-11	ELECT	1MF	20%	50V
C312	1-115-419-11	CERAMIC CHIP	3300PF	5%	25V
C313	1-163-259-91	CERAMIC CHIP	220PF	5%	50V
C314	1-128-551-11	ELECT	22MF	20%	25V
C315	1-163-245-11	CERAMIC CHIP	56PF	5%	50V
C316	1-163-275-11	CERAMIC CHIP	0.001MF	5%	50V
C317	1-104-664-11	ELECT	47MF	20%	16V
C318	1-126-933-11	ELECT	100MF	20%	16V
C319	1-126-964-11	ELECT	10MF	20%	50V
C320	1-126-934-11	ELECT	220MF	20%	16V
C321	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C323	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C325	1-126-964-11	ELECT	10MF	20%	50V
C326	1-104-664-11	ELECT	47MF	20%	25V
C327	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C328	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C329	1-104-664-11	ELECT	47MF	20%	25V
C401	1-164-690-91	CERAMIC CHIP	0.0022MF	5%	50V
C402	1-164-690-91	CERAMIC CHIP	0.0022MF	5%	50V
C403	1-126-933-11	ELECT	100MF	20%	16V
C404	1-126-963-11	ELECT	4.7MF	20%	50V
C405	1-126-963-11	ELECT	4.7MF	20%	50V
C406	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C407	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C408	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C410	1-126-933-11	ELECT	100MF	20%	16V
C411	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C413	1-163-091-00	CERAMIC CHIP	8PF	0.25PF	50V
C414	1-104-664-11	ELECT	47MF	20%	25V
C415	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C416	1-104-664-11	ELECT	47MF	20%	25V
C417	1-104-664-11	ELECT	47MF	20%	25V
C418	1-126-964-11	ELECT	10MF	20%	50V
C419	1-164-690-91	CERAMIC CHIP	0.0022MF	5%	50V
C420	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C421	1-104-664-11	ELECT	47MF	20%	25V
C422	1-126-933-11	ELECT	100MF	20%	16V
C423	1-164-690-91	CERAMIC CHIP	0.0022MF	5%	50V
C425	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C426	1-104-664-11	ELECT	47MF	20%	25V
C427	1-126-964-11	ELECT	10MF	20%	50V
C428	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C429	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C430	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C431	1-104-760-11	CERAMIC CHIP	0.047MF	10%	50V
C432	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C433	1-126-963-11	ELECT	4.7MF	20%	50V
C434	1-104-664-11	ELECT	47MF	20%	25V
C435	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V

A

REF. NO.	PART NO.	DESCRIPTION			REMARK
C436	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C438	1-104-664-11	ELECT	47MF	20%	25V
C439	1-126-960-11	ELECT	1MF	20%	50V
C440	1-126-963-11	ELECT	4.7MF	20%	50V
C442	1-130-489-00	MYLAR	0.033MF	5%	50V
C443	1-130-471-00	MYLAR	0.001MF	5%	50V
C444	1-126-963-11	ELECT	4.7MF	20%	50V
C445	1-126-963-11	ELECT	4.7MF	20%	50V
C447	1-130-489-00	MYLAR	0.033MF	5%	50V
C448	1-130-471-00	MYLAR	0.001MF	5%	50V
C450	1-126-963-11	ELECT	4.7MF	20%	50V
C451	1-126-933-11	ELECT	100MF	20%	16V
C456	1-126-933-11	ELECT	100MF	20%	16V
C457	1-126-767-11	ELECT	1000MF	20%	16V
C458	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C459	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C460	1-126-943-11	ELECT	2200MF	20%	25V
C461	1-126-943-11	ELECT	2200MF	20%	25V
C462	1-126-964-11	ELECT	10MF	20%	50V
C463	1-126-964-11	ELECT	10MF	20%	50V
C464	1-126-933-11	ELECT	100MF	20%	16V
C465	1-128-551-11	ELECT	22MF	20%	25V
C466	1-128-551-11	ELECT	22MF	20%	25V
C467	1-104-664-11	ELECT	47MF	20%	25V
C468	1-126-964-11	ELECT	10MF	20%	50V
C469	1-128-551-11	ELECT	22MF	20%	25V
C470	1-104-664-11	ELECT	47MF	20%	25V
C471	1-126-963-11	ELECT	4.7MF	20%	50V
C473	1-104-665-11	ELECT	100MF	20%	25V
C474	1-130-495-00	FILM	0.1MF	5%	50V
C475	1-130-495-00	FILM	0.1MF	5%	50V
C476	1-130-495-00	FILM	0.1MF	5%	50V
C477	1-130-495-00	FILM	0.1MF	5%	50V
C681	1-126-935-11	ELECT	470MF	20%	16V
C682	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C683	1-126-935-11	ELECT	470MF	20%	16V
C684	1-126-933-11	ELECT	100MF	20%	16V
C685	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C686	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C687	1-128-551-11	ELECT	22MF	20%	25V
C688	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C801	1-163-143-00	CERAMIC CHIP	0.0012MF	5%	50V
C802	1-163-016-00	CERAMIC CHIP	0.0039MF	10%	50V
C803	1-163-016-00	CERAMIC CHIP	0.0039MF	10%	50V
C804	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C805	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C806	1-104-664-11	ELECT	47MF	20%	25V
C807	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C808	1-163-016-00	CERAMIC CHIP	0.0039MF	10%	50V
C809	1-163-016-00	CERAMIC CHIP	0.0039MF	10%	50V
C810	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C811	1-104-664-11	ELECT	47MF	20%	25V
C812	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C813	1-104-664-11	ELECT	47MF	20%	25V
C816	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C817	1-163-038-91	CERAMIC CHIP	0.1MF		25V

REF. NO.	PART NO.	DESCRIPTION			REMARK
C820	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C821	1-104-664-11	ELECT	47MF	20%	25V
C822	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C823	1-104-664-11	ELECT	47MF	20%	25V
C824	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C825	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C826	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C827	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C828	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C829	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C830	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C831	1-104-664-11	ELECT	47MF	20%	25V
C832	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C833	1-104-664-11	ELECT	47MF	20%	25V
C834	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V
C835	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C842	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C843	1-104-664-11	ELECT	47MF	20%	25V
C845	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C848	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C849	1-104-664-11	ELECT	47MF	20%	25V
C850	1-104-664-11	ELECT	47MF	20%	25V
C851	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C852	1-104-664-11	ELECT	47MF	20%	25V
C853	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C854	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C855	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C856	1-104-664-11	ELECT	47MF	20%	25V
C858	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C862	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C863	1-163-231-11	CERAMIC CHIP	15PF	5%	50V
C864	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
C865	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C866	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C867	1-109-982-11	CERAMIC CHIP	1MF	10%	10V
C868	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C869	1-163-025-11	CERAMIC CHIP	0.001MF		50V
C870	1-104-664-11	ELECT	47MF	20%	25V
C871	1-126-963-11	ELECT	4.7MF	20%	50V
C872	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
C873	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C875	1-104-664-11	ELECT	47MF	20%	25V
C876	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C877	1-104-664-11	ELECT	47MF	20%	25V
C878	1-104-664-11	ELECT	47MF	20%	25V
C879	1-104-664-11	ELECT	47MF	20%	25V
C880	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C881	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C882	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C883	1-104-664-11	ELECT	47MF	20%	25V
C884	1-104-664-11	ELECT	47MF	20%	25V
C885	1-104-664-11	ELECT	47MF	20%	25V
C886	1-104-664-11	ELECT	47MF	20%	25V
C887	1-104-664-11	ELECT	47MF	20%	25V
C888	1-104-664-11	ELECT	47MF	20%	25V
C889	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C890	1-104-664-11	ELECT	47MF	20%	25V

A

REF. NO.	PART NO.	DESCRIPTION			REMARK
C891	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C892	1-104-664-11	ELECT	47MF	20%	25V
C893	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C894	1-104-664-11	ELECT	47MF	20%	25V
C897	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C898	1-126-934-11	ELECT	220MF	20%	16V
C911	1-164-690-91	CERAMIC CHIP	0.0022MF	5%	50V
C912	1-104-664-11	ELECT	47MF	20%	25V
C913	1-104-664-11	ELECT	47MF	20%	25V
C914	1-104-664-11	ELECT	47MF	20%	25V
C915	1-104-664-11	ELECT	47MF	20%	25V
C916	1-104-664-11	ELECT	47MF	20%	25V
C917	1-104-664-11	ELECT	47MF	20%	25V
C918	1-163-275-11	CERAMIC CHIP	0.001MF	5%	50V
C919	1-163-275-11	CERAMIC CHIP	0.001MF	5%	50V
C920	1-163-275-11	CERAMIC CHIP	0.001MF	5%	50V
C921	1-163-275-11	CERAMIC CHIP	0.001MF	5%	50V
C922	1-163-275-11	CERAMIC CHIP	0.001MF	5%	50V
C923	1-163-275-11	CERAMIC CHIP	0.001MF	5%	50V
C927	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C928	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C929	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C930	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C931	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C932	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C933	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C934	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C935	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C936	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C937	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C938	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C951	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C952	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C953	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C954	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C955	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C956	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C957	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C958	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C959	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C960	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C961	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C962	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C963	1-104-664-11	ELECT	47MF	20%	25V
C964	1-104-664-11	ELECT	47MF	20%	25V
C965	1-104-664-11	ELECT	47MF	20%	25V
C966	1-104-664-11	ELECT	47MF	20%	25V
C967	1-104-664-11	ELECT	47MF	20%	25V
C968	1-104-664-11	ELECT	47MF	20%	25V
C969	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C970	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C971	1-104-664-11	ELECT	47MF	20%	25V
C1401	1-128-551-11	ELECT	22MF	20%	25V
C1402	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1403	1-104-664-11	ELECT	47MF	20%	25V
C1404	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1405	1-104-664-11	ELECT	47MF	20%	25V
C1406	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C1407	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1408	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C1409	1-104-664-11	ELECT	47MF	20%	25V
C1410	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C1411	1-164-346-11	CERAMIC CHIP	1MF		16V
C1412	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C1413	1-164-005-11	CERAMIC CHIP	0.47MF		16V
C1414	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1415	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C1416	1-126-963-11	ELECT	4.7MF	20%	50V
C1417	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1418	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1419	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1420	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C1421	1-126-934-11	ELECT	220MF	20%	16V
C1422	1-126-960-11	ELECT	1MF	20%	50V
C1423	1-164-005-11	CERAMIC CHIP	0.47MF		16V
C1424	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C1425	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C1426	1-164-346-11	CERAMIC CHIP	1MF		16V
C1427	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1428	1-164-005-11	CERAMIC CHIP	0.47MF		16V
C1429	1-163-229-11	CERAMIC CHIP	12PF	5%	50V
C1430	1-126-963-11	ELECT	4.7MF	20%	50V
C1431	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1432	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C1433	1-126-934-11	ELECT	220MF	20%	16V
C1434	1-126-960-11	ELECT	1MF	20%	50V
C1435	1-164-005-11	CERAMIC CHIP	0.47MF		16V
C1436	1-126-934-11	ELECT	220MF	20%	16V
C1437	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C1438	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1439	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1440	1-163-229-11	CERAMIC CHIP	12PF	5%	50V
C1441	1-126-933-11	ELECT	100MF	20%	16V
C1442	1-128-551-11	ELECT	22MF	20%	25V
C1443	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1445	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1446	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1447	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1448	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1449	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1450	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1451	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1452	1-126-934-11	ELECT	220MF	20%	16V
C1453	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1454	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1455	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1457	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1458	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1459	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1460	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1461	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1462	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C1463	1-163-038-91	CERAMIC CHIP	0.1MF		25V

REF. NO.	PART NO.	DESCRIPTION			REMARK
C1464	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1465	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C1466	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1467	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1468	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1469	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1470	1-163-259-91	CERAMIC CHIP	220PF	5%	50V
C1474	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1475	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1476	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1477	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1479	1-164-346-11	CERAMIC CHIP	1MF		16V
C1480	1-164-346-11	CERAMIC CHIP	1MF		16V
C1481	1-126-933-11	ELECT	100MF	20%	16V
C1483	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1484	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1486	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1487	1-126-964-11	ELECT	10MF	20%	50V
C1488	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1489	1-164-346-11	CERAMIC CHIP	1MF		16V
C1490	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1491	1-164-346-11	CERAMIC CHIP	1MF		16V
C1492	1-164-346-11	CERAMIC CHIP	1MF		16V
C1493	1-164-346-11	CERAMIC CHIP	1MF		16V
C1494	1-104-664-11	ELECT	47MF	20%	25V
C1496	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1497	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1499	1-163-259-91	CERAMIC CHIP	220PF	5%	50V
C1500	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1501	1-104-664-11	ELECT	47MF	20%	25V
C1504	1-126-964-11	ELECT	10MF	20%	50V
C1506	1-104-664-11	ELECT	47MF	20%	25V
C1507	1-104-664-11	ELECT	47MF	20%	25V
C1508	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1510	1-163-245-11	CERAMIC CHIP	56PF	5%	50V
C1511	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1512	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1513	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1514	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1515	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1516	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1518	1-104-664-11	ELECT	47MF	20%	25V
C1520	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1521	1-126-933-11	ELECT	100MF	20%	16V
C1522	1-126-933-11	ELECT	100MF	20%	16V
C1523	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1524	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1525	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C1526	1-126-964-11	ELECT	10MF	20%	50V
C1529	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C1601	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1602	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C1603	1-164-344-11	CERAMIC CHIP	0.068MF	10%	25V
C1604	1-163-019-00	CERAMIC CHIP	0.0068MF	10%	50V
C1605	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1607	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1608	1-163-239-11	CERAMIC CHIP	33PF	5%	50V

REF. NO.	PART NO.	DESCRIPTION			REMARK
C1610	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1613	1-164-344-11	CERAMIC CHIP	0.068MF	10%	25V
C1614	1-163-019-00	CERAMIC CHIP	0.0068MF	10%	50V
C1615	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1617	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C1618	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1620	1-104-664-11	ELECT	47MF	20%	25V

<CONNECTOR>

CN001	* 1-564-507-11	PLUG, CONNECTOR 4P	
CN002	* 1-564-513-11	PLUG, CONNECTOR 10P	
CN003	1-573-979-21	CONNECTOR, BOARD TO BOARD 11P	
CN004	1-573-298-21	CONNECTOR, BOARD TO BOARD 20P	
CN151	1-695-915-11	TAB (CONTACT)	
CN201	1-573-298-21	CONNECTOR, BOARD TO BOARD 20P	
CN202	* 1-779-892-11	CONNECTOR, BOARD TO BOARD 10P	
CN203	* 1-564-509-11	PLUG, CONNECTOR 6P	
CN204	* 1-564-512-11	PLUG, CONNECTOR 9P	
CN205	1-695-915-11	TAB (CONTACT)	
CN401	1-573-298-21	CONNECTOR, BOARD TO BOARD 20P	
CN402	* 1-779-892-11	CONNECTOR, BOARD TO BOARD 10P	
CN403	* 1-564-507-11	PLUG, CONNECTOR 4P	
CN681	* 1-779-892-11	CONNECTOR, BOARD TO BOARD 10P	
CN801	* 1-779-892-11	CONNECTOR, BOARD TO BOARD 10P	
CN802	* 1-564-511-11	PLUG, CONNECTOR 8P	

<DIODE>

D001	8-719-988-61	DIODE	1SS355TE-17
D002	8-719-988-61	DIODE	1SS355TE-17
D003	8-719-988-61	DIODE	1SS355TE-17
D004	8-719-069-55	DIODE	UDZS-TE17-5.6B
D005	8-719-988-61	DIODE	1SS355TE-17
D006	8-719-069-55	DIODE	UDZS-TE17-5.6B
D151	8-719-977-81	DIODE	DTZ33B
D201	8-719-988-61	DIODE	1SS355TE-17
D202	8-719-977-28	DIODE	DTZ10B
D204	8-719-069-55	DIODE	UDZS-TE17-5.6B
D205	8-719-069-55	DIODE	UDZS-TE17-5.6B
D206	8-719-988-61	DIODE	1SS355TE-17
D207	8-719-988-61	DIODE	1SS355TE-17
D208	8-719-976-96	DIODE	DTZ4.7C
D209	8-719-988-61	DIODE	1SS355TE-17
D301	8-719-988-61	DIODE	1SS355TE-17
D302	8-719-988-61	DIODE	1SS355TE-17
D303	8-719-988-61	DIODE	1SS355TE-17
D304	8-719-977-28	DIODE	DTZ10B
D305	8-719-977-28	DIODE	DTZ10B
D402	8-719-988-61	DIODE	1SS355TE-17
D403	8-719-988-61	DIODE	1SS355TE-17
D404	8-719-988-61	DIODE	1SS355TE-17
D405	8-719-988-61	DIODE	1SS355TE-17
D406	8-719-056-95	DIODE	UDZ-TE-17-22B
D407	8-719-988-61	DIODE	1SS355TE-17
D408	8-719-988-61	DIODE	1SS355TE-17
D409	8-719-988-61	DIODE	1SS355TE-17

A

REF. NO.	PART NO.	DESCRIPTION	REMARK
D410	8-719-056-95	DIODE UDZ-TE-17-22B	
D411	8-719-056-95	DIODE UDZ-TE-17-22B	
D412	8-719-056-95	DIODE UDZ-TE-17-22B	
D413	8-719-056-95	DIODE UDZ-TE-17-22B	
D414	8-719-056-95	DIODE UDZ-TE-17-22B	
D415	8-719-056-95	DIODE UDZ-TE-17-22B	
D416	8-719-988-61	DIODE 1SS355TE-17	
D417	8-719-988-61	DIODE 1SS355TE-17	
D418	8-719-056-95	DIODE UDZ-TE-17-22B	
D420	8-719-988-61	DIODE 1SS355TE-17	
D421	8-719-988-61	DIODE 1SS355TE-17	
D801	8-719-988-61	DIODE 1SS355TE-17	
D802	8-719-988-61	DIODE 1SS355TE-17	
D803	8-719-988-61	DIODE 1SS355TE-17	
D804	8-719-988-61	DIODE 1SS355TE-17	
D805	8-719-069-55	DIODE UDZS-TE17-5.6B	
D806	8-719-069-55	DIODE UDZS-TE17-5.6B	
D807	8-719-069-55	DIODE UDZS-TE17-5.6B	
D808	8-719-069-55	DIODE UDZS-TE17-5.6B	
D809	8-719-988-61	DIODE 1SS355TE-17	
D810	8-719-988-61	DIODE 1SS355TE-17	
D816	8-719-988-61	DIODE 1SS355TE-17	
D817	8-719-988-61	DIODE 1SS355TE-17	
D818	8-719-988-61	DIODE 1SS355TE-17	
D819	8-719-988-61	DIODE 1SS355TE-17	
D820	8-719-988-61	DIODE 1SS355TE-17	
D821	8-719-988-61	DIODE 1SS355TE-17	
D822	8-719-988-61	DIODE 1SS355TE-17	
D823	8-719-988-61	DIODE 1SS355TE-17	
D824	8-719-988-61	DIODE 1SS355TE-17	
D1407	8-719-988-61	DIODE 1SS355TE-17	
D1408	8-719-988-61	DIODE 1SS355TE-17	
D1409	8-719-988-61	DIODE 1SS355TE-17	
D1410	8-719-988-61	DIODE 1SS355TE-17	

<FERRITEBEAD>

FB001	1-414-135-11	FERRITE	0UH
FB151	1-414-135-11	FERRITE	0UH
FB152	1-414-135-11	FERRITE	0UH
FB202	1-414-135-11	FERRITE	0UH
FB203	1-414-135-11	FERRITE	0UH
FB204	1-414-135-11	FERRITE	0UH
FB205	1-414-135-11	FERRITE	0UH
FB206	1-216-295-91	SHORT	0
FB207	1-216-295-91	SHORT	0
FB209	1-216-295-91	SHORT	0
FB210	1-414-135-11	FERRITE	0UH
FB211	1-414-135-11	FERRITE	0UH
FB212	1-216-295-91	SHORT	0
FB213	1-414-135-11	FERRITE	0UH
FB214	1-414-135-11	FERRITE	0UH
FB215	1-216-295-91	SHORT	0
FB216	1-216-295-91	SHORT	0
FB217	1-216-295-91	SHORT	0
FB301	1-216-295-91	SHORT	0
FB401	1-414-135-11	FERRITE	0UH
FB801	1-414-135-11	FERRITE	0UH
FB802	1-414-135-11	FERRITE	0UH
FB803	1-414-135-11	FERRITE	0UH
FB804	1-414-135-11	FERRITE	0UH
FB805	1-414-135-11	FERRITE	0UH
FB806	1-414-135-11	FERRITE	0UH
FB807	1-414-135-11	FERRITE	0UH
FB808	1-414-135-11	FERRITE	0UH
FB1401	1-414-135-11	FERRITE	0UH
FB1402	1-414-135-11	FERRITE	0UH
FB1403	1-414-135-11	FERRITE	0UH
FB1404	1-414-135-11	FERRITE	0UH
FB1405	1-414-135-11	FERRITE	0UH
FB1406	1-414-135-11	FERRITE	0UH
FB1407	1-414-135-11	FERRITE	0UH
FB1408	1-414-135-11	FERRITE	0UH
FB1409	1-414-135-11	FERRITE	0UH
FB1410	1-414-135-11	FERRITE	0UH
FB1411	1-414-135-11	FERRITE	0UH
FB1412	1-414-135-11	FERRITE	0UH
FB1413	1-414-135-11	FERRITE	0UH
FB1414	1-414-135-11	FERRITE	0UH

<FILTER>

FL201	1-239-847-11	FILTER, LOW PASS
FL202	1-239-847-11	FILTER, LOW PASS
FL203	1-239-847-11	FILTER, LOW PASS
FL401	1-239-803-11	ENCAPSULATED COMPONENT

<IC>

IC001	8-759-352-91	IC PST9143NL
IC002	8-752-909-31	IC CXP750010-010Q
IC004	8-759-527-76	IC M24C08-MN6T
IC202	8-759-568-27	IC MSM514265C-60JSDR1
IC203	8-759-161-24	IC UPC659AGS-E2
IC204	8-759-536-12	IC UPD64081BGF-3BA
IC205	8-759-591-79	IC UPC2933T-E1
IC206	8-752-091-25	IC CXA2147Q
IC401	8-759-549-74	IC TC9447F-003
IC402	8-759-352-91	IC PST9143NL
IC403	8-759-578-88	IC BH3868FS-E2
IC404	8-759-100-96	IC UPC4558G2
IC406	8-759-190-89	IC TDA7265
IC681	8-759-459-99	IC PQ09RD11
IC682	8-759-459-99	IC PQ09RD11
IC801	8-759-488-29	IC TC7W66FU(TE12R)
IC802	8-759-394-80	IC NJM2058M-TE2
IC803	8-759-589-66	IC CM0006CF
IC804	8-759-394-80	IC NJM2058M-TE2
IC805	8-752-906-76	IC CXP86324-021Q
IC806	8-759-394-80	IC NJM2058M-TE2
IC807	8-759-546-22	IC UPD6376GS-E2
IC808	8-759-032-11	IC MC74HC04AF
IC809	8-759-295-09	IC TLC2932IPW
IC810	8-759-468-90	IC ST24E16FM6TR

REF. NO.	PART NO.	DESCRIPTION	REMARK
IC811	8-759-352-91	IC PST9143NL	
IC812	8-759-235-19	IC TC74HC08AF(EL)	
IC814	8-759-032-20	IC MC74HC32AF	
IC815	8-759-546-22	IC UPD6376GS-E2	
IC816	8-759-546-22	IC UPD6376GS-E2	
IC817	8-759-546-22	IC UPD6376GS-E2	
IC818	8-759-100-96	IC UPC4558G2	
IC819	8-759-106-02	IC UPC4570G2	
IC820	8-759-106-02	IC UPC4570G2	
IC821	8-759-106-02	IC UPC4570G2	
IC822	8-759-106-02	IC UPC4570G2	
IC823	8-759-106-02	IC UPC4570G2	
IC824	8-759-106-02	IC UPC4570G2	
IC1401	8-759-351-59	IC UC528257J-80(EL)	
IC1402	8-752-086-80	IC CXA2019AQ-T4	
IC1403	8-752-086-80	IC CXA2019AQ-T4	
IC1404	8-759-932-69	IC BU4053BCF-T2	
IC1405	8-759-498-32	IC SAB9076H/N4	
IC1406	8-759-932-69	IC BU4053BCF-T2	
IC1407	8-752-080-75	IC CXA2039M-T6	
IC1408	8-759-926-17	IC SN74HC153ANS	
IC1409	8-752-058-68	IC CXA1315M	
IC1410	8-759-353-02	IC NJM2533M(TE2)	
IC1412	8-759-352-91	IC PST9143NL	
IC1601	8-759-638-04	IC Z8622912SSC-00TR	
IC1602	8-759-638-05	IC Z8613012SSC-00TR	

<COIL>

L001	1-414-183-41	INDUCTOR	10UH
L004	1-414-189-31	INDUCTOR	100UH
L151	1-414-187-11	INDUCTOR	47UH
L152	1-414-187-11	INDUCTOR	47UH
L153	1-414-187-11	INDUCTOR	47UH
L154	1-414-183-41	INDUCTOR	10UH
L155	1-414-187-11	INDUCTOR	47UH
L201	1-414-187-11	INDUCTOR	47UH
L203	1-414-187-11	INDUCTOR	47UH
L204	1-414-187-11	INDUCTOR	47UH
L205	1-414-187-11	INDUCTOR	47UH
L206	1-414-183-41	INDUCTOR	10UH
L207	1-414-183-41	INDUCTOR	10UH
L208	1-414-187-11	INDUCTOR	47UH
L209	1-414-187-11	INDUCTOR	47UH
L210	1-414-187-11	INDUCTOR	47UH
L211	1-414-857-11	INDUCTOR	100UH
L212	1-414-856-11	INDUCTOR	10UH
L213	1-414-183-41	INDUCTOR	10UH
L302	1-414-187-11	INDUCTOR	47UH
L401	1-414-187-11	INDUCTOR	47UH
L402	1-414-183-41	INDUCTOR	10UH
L681	1-406-975-21	INDUCTOR	47UH
L801	1-414-183-41	INDUCTOR	10UH
L802	1-414-183-41	INDUCTOR	10UH
L803	1-414-183-41	INDUCTOR	10UH
L804	1-414-183-41	INDUCTOR	10UH
L809	1-414-183-41	INDUCTOR	10UH
L816	1-414-183-41	INDUCTOR	10UH
L823	1-414-858-31	INDUCTOR	1MMH
L824	1-414-858-31	INDUCTOR	1MMH
L825	1-414-858-31	INDUCTOR	1MMH
L826	1-414-858-31	INDUCTOR	1MMH
L827	1-414-858-31	INDUCTOR	1MMH
L828	1-414-858-31	INDUCTOR	1MMH
L829	1-414-183-41	INDUCTOR	10UH
L830	1-407-495-00	INDUCTOR	1.8MMH
L831	1-407-495-00	INDUCTOR	1.8MMH
L832	1-407-495-00	INDUCTOR	1.8MMH
L833	1-407-495-00	INDUCTOR	1.8MMH
L834	1-407-495-00	INDUCTOR	1.8MMH
L835	1-407-495-00	INDUCTOR	1.8MMH
L843	1-414-183-41	INDUCTOR	10UH
L1401	1-414-187-11	INDUCTOR	47UH
L1402	1-414-187-11	INDUCTOR	47UH
L1403	1-414-187-11	INDUCTOR	47UH
L1404	1-414-187-11	INDUCTOR	47UH
L1405	1-414-187-11	INDUCTOR	47UH
L1406	1-414-187-11	INDUCTOR	47UH
L1407	1-414-187-11	INDUCTOR	47UH
L1408	1-414-187-11	INDUCTOR	47UH
L1409	1-414-187-11	INDUCTOR	47UH
L1410	1-414-187-11	INDUCTOR	47UH
L1411	1-414-187-11	INDUCTOR	47UH
L1412	1-414-187-11	INDUCTOR	47UH

<ICLINK>

PS401	1-532-984-11	LINK, IC	2A/90V
PS402	1-532-984-11	LINK, IC	2A/90V

<TRANSISTOR>

Q001	8-729-216-22	TRANSISTOR	2SA1162-G
Q002	8-729-422-27	TRANSISTOR	2SD601A-Q
Q003	8-729-027-38	TRANSISTOR	DTA144EKA-T146
Q004	8-729-216-22	TRANSISTOR	2SA1162-G
Q005	8-729-027-38	TRANSISTOR	DTA144EKA-T146
Q006	8-729-027-38	TRANSISTOR	DTA144EKA-T146
Q007	1-801-806-11	TRANSISTOR	DTC144EKA-T146
Q008	8-729-422-27	TRANSISTOR	2SD601A-Q
Q009	8-729-422-27	TRANSISTOR	2SD601A-Q
Q010	8-729-422-27	TRANSISTOR	2SD601A-Q
Q011	8-729-422-27	TRANSISTOR	2SD601A-Q
Q012	8-729-422-27	TRANSISTOR	2SD601A-Q
Q013	8-729-422-27	TRANSISTOR	2SD601A-Q
Q014	8-729-422-27	TRANSISTOR	2SD601A-Q
Q015	8-729-422-27	TRANSISTOR	2SD601A-Q
Q016	8-729-422-27	TRANSISTOR	2SD601A-Q
Q017	8-729-422-27	TRANSISTOR	2SD601A-Q
Q018	8-729-422-27	TRANSISTOR	2SD601A-Q
Q019	8-729-422-27	TRANSISTOR	2SD601A-Q
Q020	8-729-422-27	TRANSISTOR	2SD601A-Q
Q021	8-729-422-27	TRANSISTOR	2SD601A-Q
Q022	8-729-422-27	TRANSISTOR	2SD601A-Q

A

REF. NO.	PART NO.	DESCRIPTION	REMARK
Q023	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q024	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q151	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q152	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q153	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q201	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q202	8-729-216-22	TRANSISTOR 2SA1162-G	
Q203	8-729-216-22	TRANSISTOR 2SA1162-G	
Q204	8-729-216-22	TRANSISTOR 2SA1162-G	
Q205	8-729-216-22	TRANSISTOR 2SA1162-G	
Q206	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q207	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q208	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q209	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q210	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q211	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q212	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q213	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q214	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q215	8-729-216-22	TRANSISTOR 2SA1162-G	
Q216	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q217	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q218	8-729-216-22	TRANSISTOR 2SA1162-G	
Q219	8-729-216-22	TRANSISTOR 2SA1162-G	
Q220	8-729-216-22	TRANSISTOR 2SA1162-G	
Q221	8-729-216-22	TRANSISTOR 2SA1162-G	
Q222	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q223	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q224	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q225	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q226	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q227	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q228	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q229	8-729-216-22	TRANSISTOR 2SA1162-G	
Q230	8-729-216-22	TRANSISTOR 2SA1162-G	
Q231	8-729-216-22	TRANSISTOR 2SA1162-G	
Q232	8-729-216-22	TRANSISTOR 2SA1162-G	
Q301	8-729-216-22	TRANSISTOR 2SA1162-G	
Q302	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q303	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q304	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q401	8-729-216-22	TRANSISTOR 2SA1162-G	
Q402	8-729-216-22	TRANSISTOR 2SA1162-G	
Q403	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q404	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q405	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q406	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q407	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q408	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q409	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q410	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q411	8-729-216-22	TRANSISTOR 2SA1162-G	
Q801	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q802	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q803	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q804	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q805	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q806	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q807	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q808	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q809	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q811	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q812	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q813	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q814	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q1402	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q1403	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q1405	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q1406	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1407	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q1408	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1409	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q1410	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q1411	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q1412	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q1413	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1414	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1415	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q1416	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1417	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q1418	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1419	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1420	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1422	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q1423	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q1424	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1601	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q1602	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q1603	8-729-422-27	TRANSISTOR 2SD601A-Q	

<RESISTOR>

R001	1-216-073-00	RES,CHIP	10K	5%	1/10W
R002	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R003	1-216-049-91	RES,CHIP	1K	5%	1/10W
R004	1-216-121-91	RES,CHIP	1M	5%	1/10W
R005	1-216-097-91	RES,CHIP	100K	5%	1/10W
R006	1-216-033-00	RES,CHIP	220	5%	1/10W
R007	1-216-073-00	RES,CHIP	10K	5%	1/10W
R008	1-216-033-00	RES,CHIP	220	5%	1/10W
R009	1-216-033-00	RES,CHIP	220	5%	1/10W
R010	1-216-073-00	RES,CHIP	10K	5%	1/10W
R011	1-216-049-91	RES,CHIP	1K	5%	1/10W
R012	1-216-033-00	RES,CHIP	220	5%	1/10W
R013	1-216-073-00	RES,CHIP	10K	5%	1/10W
R014	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R015	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R016	1-216-033-00	RES,CHIP	220	5%	1/10W
R017	1-216-033-00	RES,CHIP	220	5%	1/10W
R018	1-216-033-00	RES,CHIP	220	5%	1/10W
R019	1-216-033-00	RES,CHIP	220	5%	1/10W
R020	1-216-033-00	RES,CHIP	220	5%	1/10W
R021	1-216-033-00	RES,CHIP	220	5%	1/10W

A

REF. NO.	PART NO.	DESCRIPTION			REMARK
R022	1-216-033-00	RES,CHIP	220	5%	1/10W
R023	1-216-049-91	RES,CHIP	1K	5%	1/10W
R024	1-216-025-91	RES,CHIP	100	5%	1/10W
R025	1-216-025-91	RES,CHIP	100	5%	1/10W
R026	1-216-025-91	RES,CHIP	100	5%	1/10W
R027	1-216-025-91	RES,CHIP	100	5%	1/10W
R028	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R029	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R030	1-216-033-00	RES,CHIP	220	5%	1/10W
R031	1-216-037-00	RES,CHIP	330	5%	1/10W
R032	1-216-033-00	RES,CHIP	220	5%	1/10W
R033	1-216-033-00	RES,CHIP	220	5%	1/10W
R034	1-216-033-00	RES,CHIP	220	5%	1/10W
R035	1-216-033-00	RES,CHIP	220	5%	1/10W
R036	1-216-033-00	RES,CHIP	220	5%	1/10W
R037	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R038	1-216-033-00	RES,CHIP	220	5%	1/10W
R039	1-216-033-00	RES,CHIP	220	5%	1/10W
R040	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R041	1-216-033-00	RES,CHIP	220	5%	1/10W
R042	1-216-033-00	RES,CHIP	220	5%	1/10W
R043	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R044	1-216-121-91	RES,CHIP	1M	5%	1/10W
R045	1-216-097-91	RES,CHIP	100K	5%	1/10W
R046	1-216-073-00	RES,CHIP	10K	5%	1/10W
R047	1-216-073-00	RES,CHIP	10K	5%	1/10W
R048	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R049	1-216-049-91	RES,CHIP	1K	5%	1/10W
R050	1-216-049-91	RES,CHIP	1K	5%	1/10W
R051	1-216-049-91	RES,CHIP	1K	5%	1/10W
R052	1-216-049-91	RES,CHIP	1K	5%	1/10W
R053	1-216-049-91	RES,CHIP	1K	5%	1/10W
R054	1-216-033-00	RES,CHIP	220	5%	1/10W
R055	1-216-033-00	RES,CHIP	220	5%	1/10W
R056	1-216-049-91	RES,CHIP	1K	5%	1/10W
R057	1-216-049-91	RES,CHIP	1K	5%	1/10W
R059	1-216-089-91	RES,CHIP	47K	5%	1/10W
R060	1-216-049-91	RES,CHIP	1K	5%	1/10W
R061	1-216-025-91	RES,CHIP	100	5%	1/10W
R062	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R063	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R064	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R066	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R068	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R069	1-216-033-00	RES,CHIP	220	5%	1/10W
R070	1-216-033-00	RES,CHIP	220	5%	1/10W
R071	1-216-033-00	RES,CHIP	220	5%	1/10W
R072	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R074	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R075	1-216-061-91	RES,CHIP	3.3K	5%	1/10W
R077	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R078	1-216-025-91	RES,CHIP	100	5%	1/10W
R079	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R084	1-216-025-91	RES,CHIP	100	5%	1/10W
R085	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R086	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R087	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R088	1-216-025-91	RES,CHIP	100	5%	1/10W
R089	1-216-055-00	RES,CHIP	1.8K	5%	1/10W
R090	1-216-113-00	RES,CHIP	470K	5%	1/10W
R091	1-216-017-91	RES,CHIP	47	5%	1/10W
R092	1-216-113-00	RES,CHIP	470K	5%	1/10W
R093	1-216-017-91	RES,CHIP	47	5%	1/10W
R094	1-216-113-00	RES,CHIP	470K	5%	1/10W
R095	1-216-017-91	RES,CHIP	47	5%	1/10W
R096	1-216-055-00	RES,CHIP	1.8K	5%	1/10W
R097	1-216-055-00	RES,CHIP	1.8K	5%	1/10W
R099	1-216-043-91	RES,CHIP	560	5%	1/10W
R100	1-216-043-91	RES,CHIP	560	5%	1/10W
R101	1-216-043-91	RES,CHIP	560	5%	1/10W
R102	1-216-113-00	RES,CHIP	470K	5%	1/10W
R103	1-216-113-00	RES,CHIP	470K	5%	1/10W
R104	1-216-113-00	RES,CHIP	470K	5%	1/10W
R105	1-216-017-91	RES,CHIP	47	5%	1/10W
R106	1-216-017-91	RES,CHIP	47	5%	1/10W
R107	1-216-017-91	RES,CHIP	47	5%	1/10W
R108	1-216-113-00	RES,CHIP	470K	5%	1/10W
R109	1-216-113-00	RES,CHIP	470K	5%	1/10W
R110	1-208-776-11	RES,CHIP	560	0.50%	1/10W
R111	1-208-776-11	RES,CHIP	560	0.50%	1/10W
R112	1-208-776-11	RES,CHIP	560	0.50%	1/10W
R113	1-216-113-00	RES,CHIP	470K	5%	1/10W
R114	1-216-043-91	RES,CHIP	560	5%	1/10W
R115	1-216-043-91	RES,CHIP	560	5%	1/10W
R116	1-216-043-91	RES,CHIP	560	5%	1/10W
R117	1-216-295-91	SHORT	0		
R118	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R119	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R120	1-216-061-91	RES,CHIP	3.3K	5%	1/10W
R121	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R122	1-216-033-00	RES,CHIP	220	5%	1/10W
R123	1-216-017-91	RES,CHIP	47	5%	1/10W
R124	1-216-017-91	RES,CHIP	47	5%	1/10W
R125	1-216-017-91	RES,CHIP	47	5%	1/10W
R126	1-216-033-00	RES,CHIP	220	5%	1/10W
R127	1-216-025-91	RES,CHIP	100	5%	1/10W
R128	1-216-025-91	RES,CHIP	100	5%	1/10W
R129	1-216-073-00	RES,CHIP	10K	5%	1/10W
R130	1-216-073-00	RES,CHIP	10K	5%	1/10W
R131	1-216-073-00	RES,CHIP	10K	5%	1/10W
R151	1-216-025-91	RES,CHIP	100	5%	1/10W
R152	1-216-083-00	RES,CHIP	27K	5%	1/10W
R153	1-216-689-11	RES,CHIP	39K	5%	1/10W
R154	1-216-043-91	RES,CHIP	560	5%	1/10W
R155	1-216-025-91	RES,CHIP	100	5%	1/10W
R156	1-216-045-00	RES,CHIP	680	5%	1/10W
R157	1-216-049-91	RES,CHIP	1K	5%	1/10W
R158	1-215-900-11	METAL OXIDE	22K	5%	2W
R159	1-216-041-00	RES,CHIP	470	5%	1/10W
R160	1-216-025-91	RES,CHIP	100	5%	1/10W
R161	1-216-083-00	RES,CHIP	27K	5%	1/10W
R162	1-216-041-00	RES,CHIP	470	5%	1/10W
R163	1-216-689-11	RES,CHIP	39K	5%	1/10W
R164	1-216-065-91	RES,CHIP	4.7K	5%	1/10W

A

REF. NO.	PART NO.	DESCRIPTION			REMARK
R166	1-216-025-91	RES,CHIP	100	5%	1/10W
R167	1-216-025-91	RES,CHIP	100	5%	1/10W
R168	1-216-025-91	RES,CHIP	100	5%	1/10W
R169	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R170	1-216-025-91	RES,CHIP	100	5%	1/10W
R171	1-216-295-91	SHORT	0		
R201	1-216-295-91	SHORT	0		
R202	1-216-041-00	RES,CHIP	470	5%	1/10W
R203	1-216-051-00	RES,CHIP	1.2K	5%	1/10W
R204	1-216-041-00	RES,CHIP	470	5%	1/10W
R205	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R206	1-216-295-91	SHORT	0		
R207	1-216-041-00	RES,CHIP	470	5%	1/10W
R208	1-216-017-91	RES,CHIP	47	5%	1/10W
R209	1-216-049-91	RES,CHIP	1K	5%	1/10W
R210	1-216-049-91	RES,CHIP	1K	5%	1/10W
R211	1-216-041-00	RES,CHIP	470	5%	1/10W
R212	1-208-776-11	RES,CHIP	560	0.50%	1/10W
R213	1-208-776-11	RES,CHIP	560	0.50%	1/10W
R215	1-216-025-91	RES,CHIP	100	5%	1/10W
R216	1-216-025-91	RES,CHIP	100	5%	1/10W
R217	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R218	1-216-049-91	RES,CHIP	1K	5%	1/10W
R219	1-216-298-00	RES,CHIP	2.2	5%	1/10W
R222	1-208-800-11	RES,CHIP	5.6K	0.50%	1/10W
R223	1-208-800-11	RES,CHIP	5.6K	0.50%	1/10W
R224	1-216-105-91	RES,CHIP	220K	5%	1/10W
R225	1-216-071-00	RES,CHIP	8.2K	5%	1/10W
R226	1-216-041-00	RES,CHIP	470	5%	1/10W
R227	1-216-025-91	RES,CHIP	100	5%	1/10W
R228	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R229	1-216-033-00	RES,CHIP	220	5%	1/10W
R230	1-216-025-91	RES,CHIP	100	5%	1/10W
R231	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R232	1-216-295-91	SHORT	0		
R233	1-208-776-11	RES,CHIP	560	0.50%	1/10W
R234	1-208-782-11	RES,CHIP	1K	0.50%	1/10W
R235	1-216-025-91	RES,CHIP	100	5%	1/10W
R236	1-216-025-91	RES,CHIP	100	5%	1/10W
R237	1-216-047-91	RES,CHIP	820	5%	1/10W
R238	1-208-790-11	RES,CHIP	2.2K	0.50%	1/10W
R239	1-208-822-11	RES,CHIP	47K	0.50%	1/10W
R240	1-216-025-91	RES,CHIP	100	5%	1/10W
R241	1-216-025-91	RES,CHIP	100	5%	1/10W
R242	1-216-025-91	RES,CHIP	100	5%	1/10W
R243	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R244	1-216-075-00	RES,CHIP	12K	5%	1/10W
R245	1-216-085-00	RES,CHIP	33K	5%	1/10W
R246	1-216-049-91	RES,CHIP	1K	5%	1/10W
R247	1-208-793-11	RES,CHIP	3K	0.50%	1/10W
R248	1-216-025-91	RES,CHIP	100	5%	1/10W
R249	1-216-025-91	RES,CHIP	100	5%	1/10W
R250	1-216-049-91	RES,CHIP	1K	5%	1/10W
R251	1-216-025-91	RES,CHIP	100	5%	1/10W
R252	1-216-075-00	RES,CHIP	12K	5%	1/10W
R253	1-216-085-00	RES,CHIP	33K	5%	1/10W
R255	1-216-025-91	RES,CHIP	100	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION			REMARK
R256	1-216-049-91	RES,CHIP	1K	5%	1/10W
R257	1-216-025-91	RES,CHIP	100	5%	1/10W
R258	1-216-025-91	RES,CHIP	100	5%	1/10W
R259	1-216-025-91	RES,CHIP	100	5%	1/10W
R260	1-208-810-11	RES,CHIP	15K	0.50%	1/10W
R261	1-216-049-91	RES,CHIP	1K	5%	1/10W
R262	1-216-648-11	RES,CHIP	750	0.50%	1/10W
R263	1-208-776-11	RES,CHIP	560	0.50%	1/10W
R264	1-216-049-91	RES,CHIP	1K	5%	1/10W
R265	1-216-017-91	RES,CHIP	47	5%	1/10W
R266	1-216-021-00	RES,CHIP	68	5%	1/10W
R268	1-208-800-11	RES,CHIP	5.6K	0.50%	1/10W
R269	1-208-776-11	RES,CHIP	560	0.50%	1/10W
R270	1-216-049-91	RES,CHIP	1K	5%	1/10W
R272	1-216-025-91	RES,CHIP	100	5%	1/10W
R273	1-216-025-91	RES,CHIP	100	5%	1/10W
R274	1-216-073-00	RES,CHIP	10K	5%	1/10W
R275	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R276	1-216-097-91	RES,CHIP	100K	5%	1/10W
R277	1-216-089-91	RES,CHIP	47K	5%	1/10W
R278	1-216-073-00	RES,CHIP	10K	5%	1/10W
R279	1-216-129-00	RES,CHIP	2.2M	5%	1/10W
R280	1-216-073-00	RES,CHIP	10K	5%	1/10W
R281	1-216-025-91	RES,CHIP	100	5%	1/10W
R282	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R283	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R284	1-216-025-91	RES,CHIP	100	5%	1/10W
R285	1-216-049-91	RES,CHIP	1K	5%	1/10W
R286	1-216-025-91	RES,CHIP	100	5%	1/10W
R287	1-216-025-91	RES,CHIP	100	5%	1/10W
R288	1-216-017-91	RES,CHIP	47	5%	1/10W
R289	1-216-049-91	RES,CHIP	1K	5%	1/10W
R290	1-216-049-91	RES,CHIP	1K	5%	1/10W
R291	1-216-049-91	RES,CHIP	1K	5%	1/10W
R292	1-216-049-91	RES,CHIP	1K	5%	1/10W
R293	1-216-049-91	RES,CHIP	1K	5%	1/10W
R294	1-216-049-91	RES,CHIP	1K	5%	1/10W
R295	1-216-017-91	RES,CHIP	47	5%	1/10W
R296	1-216-033-00	RES,CHIP	220	5%	1/10W
R297	1-216-033-00	RES,CHIP	220	5%	1/10W
R298	1-216-033-00	RES,CHIP	220	5%	1/10W
R299	1-216-033-00	RES,CHIP	220	5%	1/10W
R300	1-216-033-00	RES,CHIP	220	5%	1/10W
R301	1-216-033-00	RES,CHIP	220	5%	1/10W
R302	1-216-049-91	RES,CHIP	1K	5%	1/10W
R303	1-216-133-00	RES,CHIP	3.3M	5%	1/10W
R304	1-216-059-00	RES,CHIP	2.7K	5%	1/10W
R305	1-216-071-00	RES,CHIP	8.2K	5%	1/10W
R306	1-208-776-11	RES,CHIP	560	0.50%	1/10W
R307	1-208-810-11	RES,CHIP	15K	0.50%	1/10W
R308	1-216-109-00	RES,CHIP	330K	5%	1/10W
R309	1-216-061-91	RES,CHIP	3.3K	5%	1/10W
R310	1-216-033-00	RES,CHIP	220	5%	1/10W
R311	1-216-025-91	RES,CHIP	100	5%	1/10W
R312	1-216-025-91	RES,CHIP	100	5%	1/10W
R313	1-216-113-00	RES,CHIP	470K	5%	1/10W
R314	1-216-025-91	RES,CHIP	100	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION			REMARK
R315	1-216-043-91	RES,CHIP	560	5%	1/10W
R316	1-216-049-91	RES,CHIP	1K	5%	1/10W
R317	1-216-059-00	RES,CHIP	2.7K	5%	1/10W
R318	1-216-077-00	RES,CHIP	15K	5%	1/10W
R319	1-216-655-11	RES,CHIP	1.5K	0.50%	1/10W
R321	1-216-033-00	RES,CHIP	220	5%	1/10W
R322	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R323	1-216-017-91	RES,CHIP	47	5%	1/10W
R324	1-216-049-91	RES,CHIP	1K	5%	1/10W
R325	1-216-073-00	RES,CHIP	10K	5%	1/10W
R326	1-216-073-00	RES,CHIP	10K	5%	1/10W
R327	1-216-073-00	RES,CHIP	10K	5%	1/10W
R328	1-216-049-91	RES,CHIP	1K	5%	1/10W
R329	1-216-073-00	RES,CHIP	10K	5%	1/10W
R330	1-216-075-00	RES,CHIP	12K	5%	1/10W
R331	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R332	1-216-075-00	RES,CHIP	12K	5%	1/10W
R333	1-216-049-91	RES,CHIP	1K	5%	1/10W
R334	1-216-113-00	RES,CHIP	470K	5%	1/10W
R335	1-216-041-00	RES,CHIP	470	5%	1/10W
R336	1-216-049-91	RES,CHIP	1K	5%	1/10W
R337	1-216-037-00	RES,CHIP	330	5%	1/10W
R338	1-216-075-00	RES,CHIP	12K	5%	1/10W
R339	1-216-049-91	RES,CHIP	1K	5%	1/10W
R340	1-216-041-00	RES,CHIP	470	5%	1/10W
R341	1-216-040-00	RES,CHIP	430	5%	1/10W
R342	1-208-783-11	RES,CHIP	1.1K	0.50%	1/10W
R343	1-216-085-00	RES,CHIP	33K	5%	1/10W
R344	1-216-025-91	RES,CHIP	100	5%	1/10W
R345	1-216-049-91	RES,CHIP	1K	5%	1/10W
R346	1-216-089-91	RES,CHIP	47K	5%	1/10W
R347	1-216-073-00	RES,CHIP	10K	5%	1/10W
R348	1-216-079-00	RES,CHIP	18K	5%	1/10W
R349	1-216-077-00	RES,CHIP	15K	5%	1/10W
R350	1-216-073-00	RES,CHIP	10K	5%	1/10W
R351	1-216-041-00	RES,CHIP	470	5%	1/10W
R352	1-216-081-00	RES,CHIP	22K	5%	1/10W
R353	1-216-113-00	RES,CHIP	470K	5%	1/10W
R354	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R360	1-216-051-00	RES,CHIP	1.2K	5%	1/10W
R361	1-208-803-11	RES,CHIP	7.5K	0.50%	1/10W
R362	1-208-774-11	RES,CHIP	470	0.50%	1/10W
R363	1-208-798-11	RES,CHIP	4.7K	0.50%	1/10W
R401	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R402	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R403	1-216-121-91	RES,CHIP	1M	5%	1/10W
R404	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R405	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R406	1-216-035-00	RES,CHIP	270	5%	1/10W
R407	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R408	1-216-025-91	RES,CHIP	100	5%	1/10W
R409	1-216-025-91	RES,CHIP	100	5%	1/10W
R410	1-216-035-00	RES,CHIP	270	5%	1/10W
R411	1-216-025-91	RES,CHIP	100	5%	1/10W
R412	1-216-025-91	RES,CHIP	100	5%	1/10W
R413	1-216-025-91	RES,CHIP	100	5%	1/10W
R414	1-216-081-00	RES,CHIP	22K	5%	1/10W
R415	1-216-073-00	RES,CHIP	10K	5%	1/10W
R418	1-216-025-91	RES,CHIP	100	5%	1/10W
R419	1-216-025-91	RES,CHIP	100	5%	1/10W
R420	1-216-025-91	RES,CHIP	100	5%	1/10W
R421	1-216-025-91	RES,CHIP	100	5%	1/10W
R422	1-216-025-91	RES,CHIP	100	5%	1/10W
R423	1-216-089-91	RES,CHIP	47K	5%	1/10W
R424	1-215-865-11	METAL OXIDE	220	5%	1W F
R425	1-216-041-00	RES,CHIP	470	5%	1/10W
R426	1-216-073-00	RES,CHIP	10K	5%	1/10W
R428	1-216-073-00	RES,CHIP	10K	5%	1/10W
R429	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R430	1-216-041-00	RES,CHIP	470	5%	1/10W
R431	1-216-073-00	RES,CHIP	10K	5%	1/10W
R432	1-216-073-00	RES,CHIP	10K	5%	1/10W
R433	1-216-041-00	RES,CHIP	470	5%	1/10W
R434	1-216-097-91	RES,CHIP	100K	5%	1/10W
R435	1-216-073-00	RES,CHIP	10K	5%	1/10W
R437	1-216-033-00	RES,CHIP	220	5%	1/10W
R438	1-216-073-00	RES,CHIP	10K	5%	1/10W
R439	1-216-041-00	RES,CHIP	470	5%	1/10W
R440	1-216-033-00	RES,CHIP	220	5%	1/10W
R441	1-216-049-91	RES,CHIP	1K	5%	1/10W
R442	1-216-073-00	RES,CHIP	10K	5%	1/10W
R443	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R444	1-216-077-00	RES,CHIP	15K	5%	1/10W
R446	1-216-085-00	RES,CHIP	33K	5%	1/10W
R447	1-216-081-00	RES,CHIP	22K	5%	1/10W
R448	1-216-081-00	RES,CHIP	22K	5%	1/10W
R449	1-216-049-91	RES,CHIP	1K	5%	1/10W
R450	1-216-689-11	RES,CHIP	39K	5%	1/10W
R451	1-216-073-00	RES,CHIP	10K	5%	1/10W
R452	1-216-083-00	RES,CHIP	27K	5%	1/10W
R453	1-216-049-91	RES,CHIP	1K	5%	1/10W
R454	1-216-049-91	RES,CHIP	1K	5%	1/10W
R455	1-216-083-00	RES,CHIP	27K	5%	1/10W
R456	1-216-073-00	RES,CHIP	10K	5%	1/10W
R457	1-216-073-00	RES,CHIP	10K	5%	1/10W
R458	1-249-389-11	CARBON	4.7	5%	1/4W F
R459	1-249-389-11	CARBON	4.7	5%	1/4W F
R460	1-216-089-91	RES,CHIP	47K	5%	1/10W
R461	1-216-025-91	RES,CHIP	100	5%	1/10W
R462	1-216-075-00	RES,CHIP	12K	5%	1/10W
R463	1-216-089-91	RES,CHIP	47K	5%	1/10W
R464	1-216-089-91	RES,CHIP	47K	5%	1/10W
R465	1-216-121-91	RES,CHIP	1M	5%	1/10W
R466	1-216-079-00	RES,CHIP	18K	5%	1/10W
R467	1-216-077-00	RES,CHIP	15K	5%	1/10W
R468	1-216-295-91	SHORT	0		
R471	1-216-033-00	RES,CHIP	220	5%	1/10W
R472	1-216-049-91	RES,CHIP	1K	5%	1/10W
R473	1-216-049-91	RES,CHIP	1K	5%	1/10W
R474	1-216-049-91	RES,CHIP	1K	5%	1/10W
R475	1-208-817-11	RES,CHIP	30K	0.50%	1/10W
R476	1-208-817-11	RES,CHIP	30K	0.50%	1/10W
R477	1-216-089-91	RES,CHIP	47K	5%	1/10W

A

REF. NO.	PART NO.	DESCRIPTION			REMARK
R478	1-216-089-91	RES,CHIP	47K	5%	1/10W
R801	1-216-295-91	SHORT	0		
R802	1-216-295-91	SHORT	0		
R803	1-216-295-91	SHORT	0		
R804	1-216-295-91	SHORT	0		
R805	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R806	1-216-113-00	RES,CHIP	470K	5%	1/10W
R808	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R810	1-216-295-91	SHORT	0		
R811	1-216-109-00	RES,CHIP	330K	5%	1/10W
R813	1-216-117-00	RES,CHIP	680K	5%	1/10W
R814	1-216-117-00	RES,CHIP	680K	5%	1/10W
R815	1-216-025-91	RES,CHIP	100	5%	1/10W
R816	1-216-049-91	RES,CHIP	1K	5%	1/10W
R817	1-216-025-91	RES,CHIP	100	5%	1/10W
R818	1-216-025-91	RES,CHIP	100	5%	1/10W
R819	1-216-025-91	RES,CHIP	100	5%	1/10W
R820	1-216-295-91	SHORT	0		
R821	1-216-295-91	SHORT	0		
R822	1-216-295-91	SHORT	0		
R823	1-216-295-91	SHORT	0		
R824	1-216-025-91	RES,CHIP	100	5%	1/10W
R825	1-216-025-91	RES,CHIP	100	5%	1/10W
R828	1-216-049-91	RES,CHIP	1K	5%	1/10W
R829	1-216-073-00	RES,CHIP	10K	5%	1/10W
R830	1-216-025-91	RES,CHIP	100	5%	1/10W
R831	1-216-049-91	RES,CHIP	1K	5%	1/10W
R832	1-216-073-00	RES,CHIP	10K	5%	1/10W
R833	1-216-049-91	RES,CHIP	1K	5%	1/10W
R834	1-216-049-91	RES,CHIP	1K	5%	1/10W
R836	1-216-049-91	RES,CHIP	1K	5%	1/10W
R838	1-216-025-91	RES,CHIP	100	5%	1/10W
R839	1-216-025-91	RES,CHIP	100	5%	1/10W
R840	1-216-025-91	RES,CHIP	100	5%	1/10W
R842	1-216-025-91	RES,CHIP	100	5%	1/10W
R843	1-216-025-91	RES,CHIP	100	5%	1/10W
R844	1-216-025-91	RES,CHIP	100	5%	1/10W
R846	1-216-025-91	RES,CHIP	100	5%	1/10W
R847	1-216-033-00	RES,CHIP	220	5%	1/10W
R848	1-216-025-91	RES,CHIP	100	5%	1/10W
R849	1-216-025-91	RES,CHIP	100	5%	1/10W
R850	1-216-025-91	RES,CHIP	100	5%	1/10W
R851	1-216-025-91	RES,CHIP	100	5%	1/10W
R852	1-208-814-91	RES,CHIP	22K	0.50%	1/10W
R853	1-216-025-91	RES,CHIP	100	5%	1/10W
R854	1-216-025-91	RES,CHIP	100	5%	1/10W
R855	1-216-025-91	RES,CHIP	100	5%	1/10W
R856	1-216-033-00	RES,CHIP	220	5%	1/10W
R857	1-216-025-91	RES,CHIP	100	5%	1/10W
R858	1-216-073-00	RES,CHIP	10K	5%	1/10W
R859	1-216-081-00	RES,CHIP	22K	5%	1/10W
R860	1-216-025-91	RES,CHIP	100	5%	1/10W
R861	1-216-073-00	RES,CHIP	10K	5%	1/10W
R862	1-216-073-00	RES,CHIP	10K	5%	1/10W
R863	1-216-025-91	RES,CHIP	100	5%	1/10W
R864	1-208-801-11	RES,CHIP	6.2K	0.50%	1/10W
R865	1-216-025-91	RES,CHIP	100	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION			REMARK
R866	1-216-025-91	RES,CHIP	100	5%	1/10W
R867	1-216-025-91	RES,CHIP	100	5%	1/10W
R868	1-216-025-91	RES,CHIP	100	5%	1/10W
R869	1-216-025-91	RES,CHIP	100	5%	1/10W
R870	1-216-073-00	RES,CHIP	10K	5%	1/10W
R871	1-216-025-91	RES,CHIP	100	5%	1/10W
R872	1-216-025-91	RES,CHIP	100	5%	1/10W
R873	1-216-025-91	RES,CHIP	100	5%	1/10W
R874	1-216-025-91	RES,CHIP	100	5%	1/10W
R875	1-216-295-91	SHORT	0		
R876	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R877	1-208-816-11	RES,CHIP	27K	0.50%	1/10W
R878	1-216-049-91	RES,CHIP	1K	5%	1/10W
R879	1-216-295-91	SHORT	0		
R880	1-216-049-91	RES,CHIP	1K	5%	1/10W
R881	1-216-025-91	RES,CHIP	100	5%	1/10W
R882	1-216-033-00	RES,CHIP	220	5%	1/10W
R883	1-216-033-00	RES,CHIP	220	5%	1/10W
R884	1-216-049-91	RES,CHIP	1K	5%	1/10W
R885	1-216-025-91	RES,CHIP	100	5%	1/10W
R887	1-216-295-91	SHORT	0		
R888	1-216-025-91	RES,CHIP	100	5%	1/10W
R891	1-216-073-00	RES,CHIP	10K	5%	1/10W
R892	1-208-802-11	RES,CHIP	6.8K	0.50%	1/10W
R893	1-216-073-00	RES,CHIP	10K	5%	1/10W
R894	1-216-033-00	RES,CHIP	220	5%	1/10W
R895	1-216-025-91	RES,CHIP	100	5%	1/10W
R896	1-216-121-91	RES,CHIP	1M	5%	1/10W
R897	1-216-049-91	RES,CHIP	1K	5%	1/10W
R898	1-216-049-91	RES,CHIP	1K	5%	1/10W
R899	1-216-033-00	RES,CHIP	220	5%	1/10W
R900	1-216-025-91	RES,CHIP	100	5%	1/10W
R901	1-216-033-00	RES,CHIP	220	5%	1/10W
R902	1-216-033-00	RES,CHIP	220	5%	1/10W
R903	1-216-025-91	RES,CHIP	100	5%	1/10W
R904	1-216-033-00	RES,CHIP	220	5%	1/10W
R905	1-216-025-91	RES,CHIP	100	5%	1/10W
R906	1-216-025-91	RES,CHIP	100	5%	1/10W
R907	1-216-025-91	RES,CHIP	100	5%	1/10W
R908	1-216-025-91	RES,CHIP	100	5%	1/10W
R910	1-216-025-91	RES,CHIP	100	5%	1/10W
R911	1-216-025-91	RES,CHIP	100	5%	1/10W
R912	1-216-049-91	RES,CHIP	1K	5%	1/10W
R913	1-216-025-91	RES,CHIP	100	5%	1/10W
R914	1-216-049-91	RES,CHIP	1K	5%	1/10W
R915	1-216-049-91	RES,CHIP	1K	5%	1/10W
R916	1-216-049-91	RES,CHIP	1K	5%	1/10W
R917	1-216-025-91	RES,CHIP	100	5%	1/10W
R918	1-208-806-11	RES,CHIP	10K	0.50%	1/10W
R919	1-216-061-91	RES,CHIP	3.3K	5%	1/10W
R920	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R922	1-216-049-91	RES,CHIP	1K	5%	1/10W
R923	1-216-043-91	RES,CHIP	560	5%	1/10W
R924	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R925	1-216-043-91	RES,CHIP	560	5%	1/10W
R926	1-216-053-00	RES,CHIP	1.5K	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION			REMARK
R928	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R929	1-216-049-91	RES,CHIP	1K	5%	1/10W
R932	1-208-792-11	RES,CHIP	2.7K	0.50%	1/10W
R935	1-216-025-91	RES,CHIP	100	5%	1/10W
R936	1-216-025-91	RES,CHIP	100	5%	1/10W
R937	1-216-025-91	RES,CHIP	100	5%	1/10W
R938	1-208-764-11	RES,CHIP	180	0.50%	1/10W
R939	1-208-766-11	RES,CHIP	220	0.50%	1/10W
R941	1-216-061-91	RES,CHIP	3.3K	5%	1/10W
R942	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R943	1-216-041-00	RES,CHIP	470	5%	1/10W
R945	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R950	1-216-043-91	RES,CHIP	560	5%	1/10W
R951	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R952	1-216-049-91	RES,CHIP	1K	5%	1/10W
R953	1-216-025-91	RES,CHIP	100	5%	1/10W
R954	1-216-025-91	RES,CHIP	100	5%	1/10W
R955	1-216-025-91	RES,CHIP	100	5%	1/10W
R956	1-216-025-91	RES,CHIP	100	5%	1/10W
R957	1-216-025-91	RES,CHIP	100	5%	1/10W
R958	1-216-025-91	RES,CHIP	100	5%	1/10W
R959	1-208-806-11	RES,CHIP	10K	0.50%	1/10W
R960	1-208-806-11	RES,CHIP	10K	0.50%	1/10W
R961	1-208-806-11	RES,CHIP	10K	0.50%	1/10W
R962	1-208-806-11	RES,CHIP	10K	0.50%	1/10W
R963	1-208-806-11	RES,CHIP	10K	0.50%	1/10W
R964	1-208-806-11	RES,CHIP	10K	0.50%	1/10W
R965	1-208-806-11	RES,CHIP	10K	0.50%	1/10W
R966	1-208-806-11	RES,CHIP	10K	0.50%	1/10W
R968	1-208-806-11	RES,CHIP	10K	0.50%	1/10W
R970	1-208-806-11	RES,CHIP	10K	0.50%	1/10W
R972	1-208-806-11	RES,CHIP	10K	0.50%	1/10W
R974	1-208-806-11	RES,CHIP	10K	0.50%	1/10W
R976	1-208-806-11	RES,CHIP	10K	0.50%	1/10W
R978	1-208-810-11	RES,CHIP	15K	0.50%	1/10W
R979	1-208-817-11	RES,CHIP	30K	0.50%	1/10W
R980	1-208-817-11	RES,CHIP	30K	0.50%	1/10W
R981	1-208-817-11	RES,CHIP	30K	0.50%	1/10W
R982	1-208-817-11	RES,CHIP	30K	0.50%	1/10W
R983	1-208-817-11	RES,CHIP	30K	0.50%	1/10W
R985	1-208-810-11	RES,CHIP	15K	0.50%	1/10W
R987	1-208-817-11	RES,CHIP	30K	0.50%	1/10W
R989	1-208-817-11	RES,CHIP	30K	0.50%	1/10W
R991	1-208-817-11	RES,CHIP	30K	0.50%	1/10W
R993	1-208-817-11	RES,CHIP	30K	0.50%	1/10W
R994	1-208-817-11	RES,CHIP	30K	0.50%	1/10W
R996	1-208-776-11	RES,CHIP	560	0.50%	1/10W
R997	1-208-776-11	RES,CHIP	560	0.50%	1/10W
R998	1-208-776-11	RES,CHIP	560	0.50%	1/10W
R999	1-208-776-11	RES,CHIP	560	0.50%	1/10W
R1000	1-208-776-11	RES,CHIP	560	0.50%	1/10W
R1001	1-208-776-11	RES,CHIP	560	0.50%	1/10W
R1002	1-208-810-11	RES,CHIP	15K	0.50%	1/10W
R1003	1-208-818-11	RES,CHIP	33K	0.50%	1/10W
R1010	1-216-295-91	SHORT	0		
R1011	1-216-295-91	SHORT	0		
R1012	1-216-295-91	SHORT	0		
R1013	1-216-295-91	SHORT	0		
R1014	1-216-295-91	SHORT	0		
R1015	1-216-295-91	SHORT	0		
R1403	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1404	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1406	1-216-061-91	RES,CHIP	3.3K	5%	1/10W
R1407	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1408	1-216-025-91	RES,CHIP	100	5%	1/10W
R1409	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1410	1-216-025-91	RES,CHIP	100	5%	1/10W
R1411	1-216-025-91	RES,CHIP	100	5%	1/10W
R1412	1-216-025-91	RES,CHIP	100	5%	1/10W
R1413	1-216-025-91	RES,CHIP	100	5%	1/10W
R1414	1-216-025-91	RES,CHIP	100	5%	1/10W
R1415	1-216-025-91	RES,CHIP	100	5%	1/10W
R1416	1-216-025-91	RES,CHIP	100	5%	1/10W
R1417	1-216-025-91	RES,CHIP	100	5%	1/10W
R1418	1-216-025-91	RES,CHIP	100	5%	1/10W
R1419	1-216-033-00	RES,CHIP	220	5%	1/10W
R1420	1-216-045-00	RES,CHIP	680	5%	1/10W
R1421	1-216-025-91	RES,CHIP	100	5%	1/10W
R1422	1-216-025-91	RES,CHIP	100	5%	1/10W
R1423	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1424	1-216-061-91	RES,CHIP	3.3K	5%	1/10W
R1425	1-216-009-91	RES,CHIP	22	5%	1/10W
R1427	1-216-109-00	RES,CHIP	330K	5%	1/10W
R1428	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1429	1-208-774-11	RES,CHIP	470	0.50%	1/10W
R1430	1-216-033-00	RES,CHIP	220	5%	1/10W
R1431	1-216-045-00	RES,CHIP	680	5%	1/10W
R1432	1-216-071-00	RES,CHIP	8.2K	5%	1/10W
R1433	1-216-077-00	RES,CHIP	15K	5%	1/10W
R1434	1-216-025-91	RES,CHIP	100	5%	1/10W
R1435	1-216-025-91	RES,CHIP	100	5%	1/10W
R1436	1-216-109-00	RES,CHIP	330K	5%	1/10W
R1437	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1439	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R1440	1-216-025-91	RES,CHIP	100	5%	1/10W
R1441	1-216-025-91	RES,CHIP	100	5%	1/10W
R1442	1-216-025-91	RES,CHIP	100	5%	1/10W
R1443	1-216-025-91	RES,CHIP	100	5%	1/10W
R1444	1-216-025-91	RES,CHIP	100	5%	1/10W
R1445	1-216-025-91	RES,CHIP	100	5%	1/10W
R1446	1-216-025-91	RES,CHIP	100	5%	1/10W
R1447	1-208-774-11	RES,CHIP	470	0.50%	1/10W
R1448	1-216-025-91	RES,CHIP	100	5%	1/10W
R1449	1-216-025-91	RES,CHIP	100	5%	1/10W
R1450	1-216-071-00	RES,CHIP	8.2K	5%	1/10W
R1451	1-216-025-91	RES,CHIP	100	5%	1/10W
R1452	1-216-025-91	RES,CHIP	100	5%	1/10W
R1453	1-216-025-91	RES,CHIP	100	5%	1/10W
R1454	1-216-077-00	RES,CHIP	15K	5%	1/10W
R1455	1-216-025-91	RES,CHIP	100	5%	1/10W
R1456	1-216-025-91	RES,CHIP	100	5%	1/10W
R1457	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1458	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R1459	1-216-025-91	RES,CHIP	100	5%	1/10W

A

REF. NO.	PART NO.	DESCRIPTION			REMARK
R1460	1-216-025-91	RES,CHIP	100	5%	1/10W
R1461	1-216-025-91	RES,CHIP	100	5%	1/10W
R1462	1-216-025-91	RES,CHIP	100	5%	1/10W
R1463	1-216-025-91	RES,CHIP	100	5%	1/10W
R1464	1-216-025-91	RES,CHIP	100	5%	1/10W
R1465	1-216-025-91	RES,CHIP	100	5%	1/10W
R1466	1-216-025-91	RES,CHIP	100	5%	1/10W
R1467	1-216-037-00	RES,CHIP	330	5%	1/10W
R1468	1-216-295-91	SHORT	0		
R1470	1-216-009-91	RES,CHIP	22	5%	1/10W
R1471	1-216-025-91	RES,CHIP	100	5%	1/10W
R1472	1-208-774-11	RES,CHIP	470	0.50%	1/10W
R1473	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1474	1-216-033-00	RES,CHIP	220	5%	1/10W
R1476	1-208-780-11	RES,CHIP	820	0.50%	1/10W
R1477	1-216-295-91	SHORT	0		
R1479	1-216-025-91	RES,CHIP	100	5%	1/10W
R1480	1-216-025-91	RES,CHIP	100	5%	1/10W
R1481	1-216-025-91	RES,CHIP	100	5%	1/10W
R1482	1-216-041-00	RES,CHIP	470	5%	1/10W
R1483	1-216-009-91	RES,CHIP	22	5%	1/10W
R1484	1-216-009-91	RES,CHIP	22	5%	1/10W
R1486	1-208-782-11	RES,CHIP	1K	0.50%	1/10W
R1487	1-216-025-91	RES,CHIP	100	5%	1/10W
R1489	1-216-075-00	RES,CHIP	12K	5%	1/10W
R1490	1-216-081-00	RES,CHIP	22K	5%	1/10W
R1492	1-216-009-91	RES,CHIP	22	5%	1/10W
R1493	1-216-037-00	RES,CHIP	330	5%	1/10W
R1494	1-216-025-91	RES,CHIP	100	5%	1/10W
R1495	1-208-784-11	RES,CHIP	1.2K	0.50%	1/10W
R1496	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1497	1-208-774-11	RES,CHIP	470	0.50%	1/10W
R1498	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R1499	1-208-780-11	RES,CHIP	820	0.50%	1/10W
R1501	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1504	1-216-025-91	RES,CHIP	100	5%	1/10W
R1505	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1506	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1507	1-216-009-91	RES,CHIP	22	5%	1/10W
R1508	1-216-041-00	RES,CHIP	470	5%	1/10W
R1509	1-208-782-11	RES,CHIP	1K	0.50%	1/10W
R1510	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1511	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1512	1-216-075-00	RES,CHIP	12K	5%	1/10W
R1513	1-216-081-00	RES,CHIP	22K	5%	1/10W
R1514	1-216-025-91	RES,CHIP	100	5%	1/10W
R1515	1-208-806-11	RES,CHIP	10K	0.50%	1/10W
R1516	1-208-774-11	RES,CHIP	470	0.50%	1/10W
R1517	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1518	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1519	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1520	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1522	1-208-755-11	RES,CHIP	75	0.50%	1/10W
R1523	1-216-061-91	RES,CHIP	3.3K	5%	1/10W
R1525	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1527	1-216-051-00	RES,CHIP	1.2K	5%	1/10W
R1528	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1529	1-216-025-91	RES,CHIP	100	5%	1/10W
R1530	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1531	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1532	1-216-051-00	RES,CHIP	1.2K	5%	1/10W
R1533	1-216-051-00	RES,CHIP	1.2K	5%	1/10W
R1534	1-216-025-91	RES,CHIP	100	5%	1/10W
R1535	1-216-025-91	RES,CHIP	100	5%	1/10W
R1536	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1537	1-208-801-11	RES,CHIP	6.2K	0.50%	1/10W
R1540	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R1541	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1542	1-216-025-91	RES,CHIP	100	5%	1/10W
R1543	1-216-025-91	RES,CHIP	100	5%	1/10W
R1544	1-216-025-91	RES,CHIP	100	5%	1/10W
R1545	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1547	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1601	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1603	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1604	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1605	1-208-802-11	RES,CHIP	6.8K	0.50%	1/10W
R1607	1-208-806-11	RES,CHIP	10K	0.50%	1/10W
R1609	1-216-025-91	RES,CHIP	100	5%	1/10W
R1610	1-216-025-91	RES,CHIP	100	5%	1/10W
R1614	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1615	1-208-802-11	RES,CHIP	6.8K	0.50%	1/10W
R1616	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1618	1-216-033-00	RES,CHIP	220	5%	1/10W
R1619	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1621	1-208-806-11	RES,CHIP	10K	0.50%	1/10W
R1622	1-216-033-00	RES,CHIP	220	5%	1/10W
R1623	1-216-025-91	RES,CHIP	100	5%	1/10W
R1624	1-216-025-91	RES,CHIP	100	5%	1/10W
R1627	1-216-061-91	RES,CHIP	3.3K	5%	1/10W

<RELAY>

RY401	1-755-028-11	RELAY
RY402	1-755-028-11	RELAY

<TUNER>

TU151	8-598-431-20	TUNER, FSS BTF-WA411
TU152	8-598-430-00	TUNER, FSS BTF-FA401

<CRYSTAL>

X001	1-781-589-21	VIBRATOR, CRYSTAL
X202	1-567-505-11	OSCILLATOR, CRYSTAL
X203	1-579-583-11	VIBRATOR, CERAMIC
X401	1-781-590-21	VIBRATOR, CRYSTAL
X801	1-767-925-21	VIBRATOR, CRYSTAL
X1401	1-579-583-11	VIBRATOR, CERAMIC
X1402	1-567-505-11	OSCILLATOR, CRYSTAL
X1403	1-579-583-11	VIBRATOR, CERAMIC
X1404	1-567-505-11	OSCILLATOR, CRYSTAL

****

* A-1373-727-A U BOARD, COMPLETE
****

<CAPACITOR>

REF. NO.	PART NO.	DESCRIPTION			REMARK
C1701	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C1702	1-128-551-11	ELECT	22MF	20%	25V
C1703	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C1704	1-126-935-11	ELECT	470MF	20%	16V
C1705	1-128-551-11	ELECT	22MF	20%	25V
C1706	1-128-551-11	ELECT	22MF	20%	25V
C1707	1-128-551-11	ELECT	22MF	20%	25V
C1708	1-128-551-11	ELECT	22MF	20%	25V
C1709	1-104-664-11	ELECT	47MF	20%	25V
C1710	1-128-551-11	ELECT	22MF	20%	25V
C1711	1-128-551-11	ELECT	22MF	20%	25V
C1712	1-128-551-11	ELECT	22MF	20%	25V
C1713	1-128-551-11	ELECT	22MF	20%	25V
C1714	1-104-664-11	ELECT	47MF	20%	25V
C1715	1-126-935-11	ELECT	470MF	20%	16V
C1716	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1717	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1718	1-128-551-11	ELECT	22MF	20%	25V
C1719	1-128-551-11	ELECT	22MF	20%	25V
C1720	1-128-551-11	ELECT	22MF	20%	25V
C1721	1-128-551-11	ELECT	22MF	20%	25V
C1722	1-128-551-11	ELECT	22MF	20%	25V
C1723	1-128-551-11	ELECT	22MF	20%	25V
C1724	1-128-551-11	ELECT	22MF	20%	25V
C1725	1-128-551-11	ELECT	22MF	20%	25V
C1726	1-126-964-11	ELECT	10MF	20%	50V
C1727	1-126-964-11	ELECT	10MF	20%	50V
C1728	1-126-964-11	ELECT	10MF	20%	50V
C1729	1-126-964-11	ELECT	10MF	20%	50V
C1730	1-128-551-11	ELECT	22MF	20%	25V
C1731	1-126-964-11	ELECT	10MF	20%	50V
C1732	1-126-964-11	ELECT	10MF	20%	50V
C1733	1-128-551-11	ELECT	22MF	20%	25V
C1734	1-128-551-11	ELECT	22MF	20%	25V
C1735	1-128-551-11	ELECT	22MF	20%	25V
C1736	1-128-551-11	ELECT	22MF	20%	25V
C1737	1-128-551-11	ELECT	22MF	20%	25V
C1738	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C1740	1-126-935-11	ELECT	470MF	20%	16V
C1741	1-128-551-11	ELECT	22MF	20%	25V
C1742	1-128-551-11	ELECT	22MF	20%	25V
C1743	1-104-664-11	ELECT	47MF	20%	25V
C1744	1-128-551-11	ELECT	22MF	20%	25V
C2001	1-126-960-11	ELECT	1MF	20%	50V
C2002	1-128-551-11	ELECT	22MF	20%	25V
C2003	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C2005	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C2006	1-104-664-11	ELECT	47MF	20%	25V

<CONNECTOR>

REF. NO.		PART NO.	DESCRIPTION	REMARK
CN1701		1-573-301-21	CONNECTOR, BOARD TO BOARD 20P	
CN1702	*	1-564-526-11	PLUG, CONNECTOR 11P	
CN1703		1-573-301-21	CONNECTOR, BOARD TO BOARD 20P	
CN2001		1-573-301-21	CONNECTOR, BOARD TO BOARD 20P	

<DIODE>

D1701	8-719-110-17	DIODE	RD10ESB2
D1702	8-719-110-17	DIODE	RD10ESB2
D1703	8-719-110-17	DIODE	RD10ESB2
D1704	8-719-110-17	DIODE	RD10ESB2
D1705	8-719-110-17	DIODE	RD10ESB2
D1706	8-719-110-17	DIODE	RD10ESB2
D1707	8-719-110-17	DIODE	RD10ESB2
D1708	8-719-110-17	DIODE	RD10ESB2
D1709	8-719-110-17	DIODE	RD10ESB2
D1710	8-719-110-17	DIODE	RD10ESB2
D1711	8-719-110-17	DIODE	RD10ESB2
D1712	8-719-110-17	DIODE	RD10ESB2
D1713	8-719-110-17	DIODE	RD10ESB2
D1714	8-719-110-17	DIODE	RD10ESB2
D1715	8-719-110-17	DIODE	RD10ESB2
D1716	8-719-110-17	DIODE	RD10ESB2
D1717	8-719-110-17	DIODE	RD10ESB2
D1718	8-719-110-17	DIODE	RD10ESB2
D1719	8-719-110-17	DIODE	RD10ESB2
D1720	8-719-110-17	DIODE	RD10ESB2
D1721	8-719-110-17	DIODE	RD10ESB2
D1722	8-719-110-17	DIODE	RD10ESB2
D1723	8-719-110-17	DIODE	RD10ESB2
D1724	8-719-110-17	DIODE	RD10ESB2
D1725	8-719-110-17	DIODE	RD10ESB2
D1726	8-719-110-17	DIODE	RD10ESB2
D1727	8-719-110-17	DIODE	RD10ESB2
D1728	8-719-110-17	DIODE	RD10ESB2
D1729	8-719-110-17	DIODE	RD10ESB2
D1730	8-719-110-17	DIODE	RD10ESB2
D1731	8-719-991-33	DIODE	1SS133T-77
D1732	8-719-991-33	DIODE	1SS133T-77
D2001	8-719-991-33	DIODE	1SS133T-77
D2002	8-719-991-33	DIODE	1SS133T-77
D2003	8-719-109-89	DIODE	RD5.6ESB2
D2004	8-719-109-89	DIODE	RD5.6ESB2
D2005	8-719-109-89	DIODE	RD5.6ESB2
D2006	8-719-109-89	DIODE	RD5.6ESB2
D2007	8-719-109-89	DIODE	RD5.6ESB2

<IC>

IC1701	8-759-100-96	IC	UPC4558G2
IC1702	8-752-066-69	IC	CXA1845Q
IC1703	8-759-353-02	IC	NJM2533M(TE2)
IC1704	8-759-443-11	IC	NJM2283M-TE1
IC2001	8-759-470-63	IC	NJM2145M-TE2

U

REF. NO.	PART NO.	DESCRIPTION	REMARK
		<JACK>	
J1701	1-750-515-11	TERMINAL BLOCK, S 3P(VIDEO 1 IN)	
J1702	1-750-515-11	TERMINAL BLOCK, S 3P(VIDEO 3 IN)	
J1703	1-774-358-11	JACK BLOCK, PIN(VIDEO 4 IN)	
J1704	1-774-358-11	JACK BLOCK, PIN(VIDEO 5 IN)	
J1705	1-750-517-11	JACK BLOCK, PIN 3P(TV OUT)	
J1706	1-750-517-11	JACK BLOCK, PIN 3P(MONITOR OUT)	
J1707	1-750-516-11	JACK BLOCK, PIN 2P(AUDIO (VAR/FIX)OUT)	
J2001	1-764-143-11	JACK 3P(CONTROL S OUT)	
J2002	1-764-143-11	JACK 3P(S-LINK 5)	
J2003	1-764-143-11	JACK 3P(S-LINK 4)	
J2004	1-764-143-11	JACK 3P(S-LINK 3)	
J2005	1-764-143-11	JACK 3P(S-LINK 1)	
		<COIL>	
L1701	1-414-187-11	INDUCTOR 47UH	
		<TRANSISTOR>	
Q1701	8-729-027-56	TRANSISTOR DTC143TKA-T146	
Q1702	8-729-027-56	TRANSISTOR DTC143TKA-T146	
Q1703	8-729-027-56	TRANSISTOR DTC143TKA-T146	
Q1704	8-729-027-56	TRANSISTOR DTC143TKA-T146	
Q1705	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q1706	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q1707	8-729-027-56	TRANSISTOR DTC143TKA-T146	
Q1708	8-729-027-56	TRANSISTOR DTC143TKA-T146	
Q1709	8-729-027-56	TRANSISTOR DTC143TKA-T146	
Q1710	8-729-027-56	TRANSISTOR DTC143TKA-T146	
Q1711	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1712	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1713	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q1714	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q1715	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q1716	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q1717	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q1718	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q1723	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1724	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q1725	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q1726	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q1727	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1728	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1729	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1730	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q1731	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q1732	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q1733	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1734	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1735	8-729-216-22	TRANSISTOR 2SA1162-G	
Q2001	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q2002	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q2003	8-729-216-22	TRANSISTOR 2SA1162-G	
Q2004	8-729-216-22	TRANSISTOR 2SA1162-G	
Q2005	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q2006	8-729-216-22	TRANSISTOR 2SA1162-G	
Q2008	8-729-216-22	TRANSISTOR 2SA1162-G	
Q2010	8-729-216-22	TRANSISTOR 2SA1162-G	
		<RESISTOR>	
R1701	1-216-022-00	RES,CHIP 75 5% 1/10W	
R1702	1-216-041-00	RES,CHIP 470 5% 1/10W	
R1703	1-216-041-00	RES,CHIP 470 5% 1/10W	
R1704	1-216-022-00	RES,CHIP 75 5% 1/10W	
R1705	1-216-113-00	RES,CHIP 470K 5% 1/10W	
R1706	1-216-113-00	RES,CHIP 470K 5% 1/10W	
R1707	1-216-022-00	RES,CHIP 75 5% 1/10W	
R1708	1-216-022-00	RES,CHIP 75 5% 1/10W	
R1709	1-216-022-00	RES,CHIP 75 5% 1/10W	
R1710	1-216-113-00	RES,CHIP 470K 5% 1/10W	
R1711	1-216-113-00	RES,CHIP 470K 5% 1/10W	
R1712	1-216-022-00	RES,CHIP 75 5% 1/10W	
R1713	1-216-022-00	RES,CHIP 75 5% 1/10W	
R1714	1-216-022-00	RES,CHIP 75 5% 1/10W	
R1715	1-216-041-00	RES,CHIP 470 5% 1/10W	
R1716	1-216-041-00	RES,CHIP 470 5% 1/10W	
R1717	1-216-041-00	RES,CHIP 470 5% 1/10W	
R1718	1-216-041-00	RES,CHIP 470 5% 1/10W	
R1719	1-216-113-00	RES,CHIP 470K 5% 1/10W	
R1720	1-216-113-00	RES,CHIP 470K 5% 1/10W	
R1721	1-216-089-91	RES,CHIP 47K 5% 1/10W	
R1722	1-216-113-00	RES,CHIP 470K 5% 1/10W	
R1723	1-216-113-00	RES,CHIP 470K 5% 1/10W	
R1724	1-216-089-91	RES,CHIP 47K 5% 1/10W	
R1725	1-216-113-00	RES,CHIP 470K 5% 1/10W	
R1726	1-216-113-00	RES,CHIP 470K 5% 1/10W	
R1727	1-216-022-00	RES,CHIP 75 5% 1/10W	
R1728	1-216-022-00	RES,CHIP 75 5% 1/10W	
R1729	1-216-022-00	RES,CHIP 75 5% 1/10W	
R1730	1-216-113-00	RES,CHIP 470K 5% 1/10W	
R1731	1-216-113-00	RES,CHIP 470K 5% 1/10W	
R1732	1-216-022-00	RES,CHIP 75 5% 1/10W	
R1733	1-216-022-00	RES,CHIP 75 5% 1/10W	
R1734	1-216-022-00	RES,CHIP 75 5% 1/10W	
R1735	1-216-113-00	RES,CHIP 470K 5% 1/10W	
R1736	1-216-113-00	RES,CHIP 470K 5% 1/10W	
R1737	1-216-019-00	RES,CHIP 56 5% 1/10W	
R1738	1-216-017-91	RES,CHIP 47 5% 1/10W	
R1739	1-216-049-91	RES,CHIP 1K 5% 1/10W	
R1740	1-216-049-91	RES,CHIP 1K 5% 1/10W	
R1741	1-216-041-00	RES,CHIP 470 5% 1/10W	
R1742	1-216-041-00	RES,CHIP 470 5% 1/10W	
R1743	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
R1744	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R1745	1-216-041-00	RES,CHIP 470 5% 1/10W	
R1746	1-216-041-00	RES,CHIP 470 5% 1/10W	
R1747	1-216-041-00	RES,CHIP 470 5% 1/10W	
R1748	1-216-041-00	RES,CHIP 470 5% 1/10W	
R1749	1-216-019-00	RES,CHIP 56 5% 1/10W	
R1750	1-216-017-91	RES,CHIP 47 5% 1/10W	

U G

REF. NO.	PART NO.	DESCRIPTION			REMARK
R1751	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1752	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1753	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1754	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1755	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1756	1-216-089-91	RES,CHIP	47K	5%	1/10W
R1757	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1758	1-216-089-91	RES,CHIP	47K	5%	1/10W
R1759	1-216-017-91	RES,CHIP	47	5%	1/10W
R1760	1-216-009-91	RES,CHIP	22	5%	1/10W
R1761	1-216-025-91	RES,CHIP	100	5%	1/10W
R1769	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1772	1-216-047-91	RES,CHIP	820	5%	1/10W
R1777	1-216-025-91	RES,CHIP	100	5%	1/10W
R1778	1-216-025-91	RES,CHIP	100	5%	1/10W
R1779	1-216-025-91	RES,CHIP	100	5%	1/10W
R1780	1-216-025-91	RES,CHIP	100	5%	1/10W
R1781	1-216-025-91	RES,CHIP	100	5%	1/10W
R1782	1-216-025-91	RES,CHIP	100	5%	1/10W
R1783	1-216-025-91	RES,CHIP	100	5%	1/10W
R1784	1-216-025-91	RES,CHIP	100	5%	1/10W
R1785	1-216-025-91	RES,CHIP	100	5%	1/10W
R1786	1-216-025-91	RES,CHIP	100	5%	1/10W
R1787	1-216-653-11	METAL CHIP	1.2K	0.50%	1/10W
R1788	1-216-041-00	RES,CHIP	470	5%	1/10W
R1789	1-216-653-11	METAL CHIP	1.2K	0.50%	1/10W
R1790	1-216-041-00	RES,CHIP	470	5%	1/10W
R1791	1-216-655-11	RES,CHIP	1.5K	0.50%	1/10W
R1792	1-208-776-11	RES,CHIP	560	0.50%	1/10W
R1793	1-216-025-91	RES,CHIP	100	5%	1/10W
R1794	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1795	1-216-093-91	RES,CHIP	68K	5%	1/10W
R1796	1-216-025-91	RES,CHIP	100	5%	1/10W
R1797	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1798	1-216-025-91	RES,CHIP	100	5%	1/10W
R1799	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1800	1-216-025-91	RES,CHIP	100	5%	1/10W
R1801	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1806	1-216-025-91	RES,CHIP	100	5%	1/10W
R1807	1-216-025-91	RES,CHIP	100	5%	1/10W
R1808	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1810	1-216-025-91	RES,CHIP	100	5%	1/10W
R1811	1-216-025-91	RES,CHIP	100	5%	1/10W
R1812	1-216-025-91	RES,CHIP	100	5%	1/10W
R1813	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1814	1-216-653-11	METAL CHIP	1.2K	0.50%	1/10W
R1815	1-216-041-00	RES,CHIP	470	5%	1/10W
R1816	1-216-653-11	METAL CHIP	1.2K	0.50%	1/10W
R1817	1-216-041-00	RES,CHIP	470	5%	1/10W
R1818	1-216-025-91	RES,CHIP	100	5%	1/10W
R1819	1-216-025-91	RES,CHIP	100	5%	1/10W
R1820	1-216-655-11	RES,CHIP	1.5K	0.50%	1/10W
R1821	1-208-784-11	RES,CHIP	1.2K	0.50%	1/10W
R1822	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1823	1-216-025-91	RES,CHIP	100	5%	1/10W
R1824	1-216-025-91	RES,CHIP	100	5%	1/10W
R1825	1-216-025-91	RES,CHIP	100	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION			REMARK
R1826	1-216-025-91	RES,CHIP	100	5%	1/10W
R1828	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1829	1-216-025-91	RES,CHIP	100	5%	1/10W
R1830	1-216-025-91	RES,CHIP	100	5%	1/10W
R1831	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1832	1-216-025-91	RES,CHIP	100	5%	1/10W
R1833	1-216-025-91	RES,CHIP	100	5%	1/10W
R1834	1-216-025-91	RES,CHIP	100	5%	1/10W
R1837	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1838	1-216-025-91	RES,CHIP	100	5%	1/10W
R1839	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1840	1-216-025-91	RES,CHIP	100	5%	1/10W
R1841	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1842	1-216-025-91	RES,CHIP	100	5%	1/10W
R1843	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1844	1-216-025-91	RES,CHIP	100	5%	1/10W
R1845	1-216-025-91	RES,CHIP	100	5%	1/10W
R1846	1-216-025-91	RES,CHIP	100	5%	1/10W
R1847	1-216-025-91	RES,CHIP	100	5%	1/10W
R1848	1-216-089-91	RES,CHIP	47K	5%	1/10W
R1849	1-216-089-91	RES,CHIP	47K	5%	1/10W
R1850	1-216-089-91	RES,CHIP	47K	5%	1/10W
R2001	1-216-041-00	RES,CHIP	470	5%	1/10W
R2002	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R2003	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2004	1-216-089-91	RES,CHIP	47K	5%	1/10W
R2005	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2006	1-216-089-91	RES,CHIP	47K	5%	1/10W
R2007	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R2008	1-216-105-91	RES,CHIP	220K	5%	1/10W
R2009	1-216-097-91	RES,CHIP	100K	5%	1/10W
R2010	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R2011	1-216-089-91	RES,CHIP	47K	5%	1/10W
R2018	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2020	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2022	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2024	1-216-025-91	RES,CHIP	100	5%	1/10W

<TERMINAL BOARD>

TB1701	1-537-712-11	TERMINAL, PUSH (CENTER SPEAKER)

****

* A-1316-437-A G BOARD, COMPLETE (53V80)
****
* A-1316-471-A G BOARD, COMPLETE (48/61V80)
****

	1-533-223-11	HOLDER, FUSE
	1-923-106-33	WIREUL1007 AWG24 160MM BLK
	1-923-514-77	WIREUL1007 AWG24 35MM BLK
*	4-039-590-01	SHIELD, TRANSFORMER
	4-382-854-11	SCREW(M3X10), P, SW (+)
	7-682-952-09	SCREW+PSW 3X16

KP-48V80/53V80/61V80

RM-Y905 RM-Y905 RM-Y905

G

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

• The components identified by ⋈ in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.

REF. NO.		PART NO.	DESCRIPTION			REMARK
			<CAPACITOR>			
C501		1-126-959-11	ELECT	0.47MF	20%	50V
C502		1-102-002-00	CERAMIC	680PF	10%	500V
C505		1-106-383-00	MYLAR	0.047MF	10%	200V
C506		1-102-212-00	CERAMIC	820PF	10%	500V
C508		1-102-002-00	CERAMIC	680PF	10%	500V
C510		1-130-471-00	MYLAR	0.001MF	5%	50V
C513		1-126-933-11	ELECT	100MF	20%	16V
C514		1-130-495-00	MYLAR	0.1MF	5%	50V
C515		1-126-960-11	ELECT	1MF	20%	50V
C516		1-126-965-11	ELECT	22MF	20%	50V
⋈C517	⚠	1-162-134-11	CERAMIC	470PF	10%	2KV
C518		1-130-487-00	MYLAR	0.022MF	5%	50V
C521	⚠	1-128-660-91	FILM	0.039MF	3%	630V
C522	⚠	1-117-658-11	FILM	14000PF	3%	1.2KV
C525		1-136-479-11	FILM	0.001MF	5%	50V
C526		1-130-475-00	MYLAR	0.0022MF	5%	50V
C527		1-129-702-00	FILM	0.001MF	5%	630V
C529		1-130-495-00	MYLAR	0.1MF	5%	50V
C531		1-117-673-11	FILM	1.5MF	5%	250V
C533		1-106-359-00	MYLAR	0.0047MF	5%	100V
C534		1-162-116-00	CERAMIC	680PF	10%	2KV
C535		1-162-116-00	CERAMIC	680PF	10%	2KV
C536		1-126-965-11	ELECT	22MF	20%	50V
C537		1-102-244-00	CERAMIC	220PF	10%	500V
C538		1-106-359-00	MYLAR	0.0047MF	5%	100V
C540		1-107-645-11	ELECT	22MF	20%	160V
C542		1-102-228-00	CERAMIC	470PF	10%	500V
C543		1-117-813-11	FILM	0.75MF	5%	250V
C544		1-110-626-11	ELECT	330MF	20%	160V
C545		1-162-114-00	CERAMIC	0.0047MF		2KV
C546		1-107-649-11	ELECT	2.2MF	20%	250V
C547		1-126-971-11	ELECT	470MF	20%	50V
C548		1-104-665-11	ELECT	100MF	20%	25V
C549		1-130-489-00	MYLAR	0.033MF	5%	50V
C550		1-104-665-11	ELECT	100MF	20%	25V
C551		1-126-971-11	ELECT	470MF	20%	50V
C552		1-130-489-00	MYLAR	0.033MF	5%	50V
C553		1-126-935-11	ELECT	470MF	20%	16V
C554		1-126-935-11	ELECT	470MF	20%	16V
C555		1-104-665-11	ELECT	100MF	20%	25V
C556		1-104-665-11	ELECT	100MF	20%	25V
C557		1-128-562-11	ELECT	47MF	20%	100V
C563		1-104-664-11	ELECT	47MF	20%	25V
C564		1-102-129-00	CERAMIC	0.01MF	10%	50V
C565		1-102-129-00	CERAMIC	0.01MF	10%	50V
C566		1-104-666-11	ELECT	220MF	20%	25V
C567		1-106-387-00	MYLAR	0.068MF	5%	200V
C601	⚠	1-136-311-11	FILM	0.47MF	20%	125V
C602		1-129-722-00	FILM	0.047MF	5%	630V
C604	⚠	1-113-920-11	CERAMIC	0.0022MF	20%	250V
C606	⚠	1-113-920-11	CERAMIC	0.0022MF	20%	250V
C607	⚠	1-136-311-11	FILM	0.47MF	20%	125V
C608		1-107-670-11	ELECT	10MF	20%	400V
C609		1-130-467-00	MYLAR	470PF	5%	50V
C610		1-130-471-00	MYLAR	0.001MF	5%	50V
C611		1-104-350-11	ELECT(BLOCK)	1000MF	20%	250V
C612		1-104-350-11	ELECT(BLOCK)	1000MF	20%	250V
C613		1-136-165-00	FILM	0.1MF	5%	50V
C614		1-130-467-00	MYLAR	470PF	5%	50V
C615		1-104-331-11	CERAMIC	0.0022MF	10%	1KV
C616		1-130-471-00	MYLAR	0.001MF	5%	50V
C617		1-137-605-11	FILM	0.01MF	10%	250V
C618		1-126-965-11	ELECT	22MF	20%	50V
C619		1-104-664-11	ELECT	47MF	20%	16V
C620		1-136-175-00	FILM	0.68MF	5%	50V
C621		1-136-175-00	FILM	0.68MF	5%	50V
C622		1-136-171-00	FILM	0.33MF	5%	50V
C623		1-136-171-00	FILM	0.33MF	5%	50V
C624		1-104-330-91	CERAMIC	470PF	10%	1KV
C625		1-104-664-11	ELECT	47MF	20%	16V
C626		1-104-664-11	ELECT	47MF	20%	16V
C651		1-164-644-11	CERAMIC	330PF	10%	500V
C654		1-126-953-11	ELECT	2200MF	20%	35V
C655		1-126-953-11	ELECT	2200MF	20%	35V
C656		1-102-121-00	CERAMIC	0.0022MF	10%	50V
C657		1-126-768-11	ELECT	2200MF	20%	16V
C658		1-126-943-11	ELECT	2200MF	20%	25V
C659		1-126-943-11	ELECT	2200MF	20%	25V
C662		1-123-024-21	ELECT	33MF		160V
C663		1-104-665-11	ELECT	100MF	20%	25V
C664		1-107-910-11	ELECT	100MF	20%	35V
C665		1-126-934-11	ELECT	220MF	20%	10V
C666		1-126-927-11	ELECT	2200MF	20%	10V
C667		1-104-664-11	ELECT	47MF	20%	25V
C668		1-104-664-11	ELECT	47MF	20%	25V
C669		1-104-664-11	ELECT	47MF	20%	25V
C670		1-106-343-00	MYLAR	0.001MF	10%	200V
C671		1-106-343-00	MYLAR	0.001MF	10%	200V
C672		1-104-664-11	ELECT	47MF	20%	25V
C673		1-126-960-11	ELECT	1MF	20%	50V
C674		1-104-664-11	ELECT	47MF	20%	25V
C676		1-126-940-11	ELECT	330MF	20%	25V
C678		1-104-665-11	ELECT	100MF	20%	25V
C679		1-104-664-11	ELECT	47MF	20%	25V
C680		1-128-551-11	ELECT	22MF	20%	25V
C1501		1-130-495-00	MYLAR	0.1MF	5%	50V
C1502		1-126-941-11	ELECT	470MF	20%	25V
C1504		1-102-106-00	CERAMIC	100PF	10%	50V
C1505		1-104-664-11	ELECT	47MF	20%	25V
C1506		1-102-106-00	CERAMIC	100PF	10%	50V
C1507		1-126-942-61	ELECT	1000MF	20%	25V
C1508		1-102-121-00	CERAMIC	0.0022MF	10%	50V
C1510		1-126-941-11	ELECT	470MF	20%	25V
C1512		1-126-933-11	ELECT	100MF	20%	16V
C1516		1-104-665-11	ELECT	100MF	20%	25V
C1518		1-102-129-00	CERAMIC	0.01MF	10%	50V
C1519		1-102-106-00	CERAMIC	100PF	10%	50V
C1520		1-126-933-11	ELECT	100MF	20%	16V
C1521		1-126-941-11	ELECT	470MF	20%	25V
C1522		1-126-941-11	ELECT	470MF	20%	25V
C1523		1-126-964-11	ELECT	10MF	20%	50V
C1524		1-102-106-00	CERAMIC	100PF	10%	50V

G

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION			REMARK
C1525	1-102-852-91	CERAMIC	47PF	5%	50V
C1526	1-136-177-00	FILM	1MF	5%	50V
C1527	1-102-129-00	CERAMIC	0.01MF	10%	50V
C1528	1-126-941-11	ELECT	470MF	20%	25V
C1530	1-102-106-00	CERAMIC	100PF	10%	50V
C1531	1-102-106-00	CERAMIC	100PF	10%	50V
C1533	1-126-941-11	ELECT	470MF	20%	25V
C1534	1-102-129-00	CERAMIC	0.01MF	10%	50V
C1536	1-102-106-00	CERAMIC	100PF	10%	50V
C1537	1-102-129-00	CERAMIC	0.01MF	10%	50V
C1538	1-126-941-11	ELECT	470MF	20%	25V
C1539	1-104-665-11	ELECT	100MF	20%	25V
C1540	1-126-941-11	ELECT	470MF	20%	25V
C1541	1-102-129-00	CERAMIC	0.01MF	10%	50V
C1542	1-102-129-00	CERAMIC	0.01MF	10%	50V
C1545	1-126-933-11	ELECT	100MF	20%	16V
C1546	1-102-129-00	CERAMIC	0.01MF	10%	50V
C1547	1-130-487-00	MYLAR	0.022MF	5%	50V
C1548	1-136-177-00	FILM	1MF	5%	50V
C1549	1-130-471-00	MYLAR	0.001MF	5%	50V
C1550	1-104-665-11	ELECT	100MF	20%	25V
C1551	1-102-121-00	CERAMIC	0.0022MF	10%	50V
C1552	1-106-220-00	MYLAR	0.1MF	5%	100V
C1553	1-107-504-11	CERAMIC	10PF	0.5PF	500V
C1555	1-104-665-11	ELECT	100MF	20%	25V
C1556	1-104-665-11	ELECT	100MF	20%	25V
C1557	1-126-969-11	ELECT	220MF	20%	50V
C1559	1-137-401-11	FILM	0.22MF	5%	100V
C1560	1-126-942-61	ELECT	1000MF	20%	25V
C1561	1-102-121-00	CERAMIC	0.0022MF	10%	50V
C1562	1-102-129-00	CERAMIC	0.01MF	10%	50V
C1563	1-137-370-11	FILM	0.01MF	5%	50V
C1566	1-137-370-11	FILM	0.01MF	5%	50V
C1570	1-137-374-11	FILM	0.047MF	5%	50V

<CONNECTOR>

CN501	*	1-779-890-11	CONNECTOR, BOARD TO BOARD 10P
CN502	*	1-506-371-00	PIN, CONNECTOR 2P
CN503	*	1-564-513-11	PLUG, CONNECTOR 10P
CN504	*	1-580-689-11	PIN, CONNECTOR (PC BOARD) 4P
CN505	*	1-580-689-11	PIN, CONNECTOR (PC BOARD) 4P
CN506	*	1-580-689-11	PIN, CONNECTOR (PC BOARD) 4P
CN507	*	1-691-134-11	PIN, CONNECTOR (PC BOARD) 2P
CN601	*	1-580-843-11	PIN, CONNECTOR (POWER)
CN605	*	1-779-890-11	CONNECTOR, BOARD TO BOARD 10P
CN651	*	1-779-890-11	CONNECTOR, BOARD TO BOARD 10P
CN652	*	1-573-963-11	PIN, CONNECTOR (PC BOARD) 3P
CN653		1-695-915-11	TAB (CONTACT)
CN1501	*	1-564-507-11	PLUG, CONNECTOR 4P
CN1502	*	1-779-890-11	CONNECTOR, BOARD TO BOARD 10P
CN1503	*	1-564-507-11	PLUG, CONNECTOR 4P
CN1504	*	1-564-507-11	PLUG, CONNECTOR 4P
CN1505	*	1-564-507-11	PLUG, CONNECTOR 4P
CN1506	*	1-564-506-11	PLUG, CONNECTOR 3P
CN1507	*	1-564-506-11	PLUG, CONNECTOR 3P
CN1508	*	1-564-506-11	PLUG, CONNECTOR 3P

REF. NO.	PART NO.	DESCRIPTION	REMARK

<DIODE>

D501	8-719-109-85	DIODE	RD5.1ESB2
D505	8-719-110-41	DIODE	RD15ESB2
D506	8-719-921-63	DIODE	MTZJ-7.5B
D507	8-719-991-33	DIODE	1SS133T-77
D513	8-719-991-33	DIODE	1SS133T-77
D517	8-719-979-85	DIODE	EGP20G
D518	8-719-945-80	DIODE	ERC06-15S
D520	8-719-302-43	DIODE	EL1Z
D522	8-719-302-43	DIODE	EL1Z
D525	8-719-018-82	DIODE	RGP02-20EL-6394
D526	8-719-018-82	DIODE	RGP02-20EL-6394
D528	8-719-908-03	DIODE	GP08D
D529	8-719-302-43	DIODE	EL1Z
D530	8-719-991-33	DIODE	1SS133T-77
D531	8-719-991-33	DIODE	1SS133T-77
D532	8-719-908-03	DIODE	GP08D
D533	8-719-302-43	DIODE	EL1Z
D534	8-719-302-43	DIODE	EL1Z
D601	8-719-068-00	DIODE	ERC04-06SE
D602	8-719-068-00	DIODE	ERC04-06SE
D603	⚠ 8-719-510-53	DIODE	D4SB60L
D604	8-719-110-41	DIODE	RD15ESB2
D605	8-719-110-49	DIODE	RD18ESB2
D607	8-719-991-33	DIODE	1SS133T-77
D609	8-719-948-45	DIODE	ERA22-08
D610	8-719-510-48	DIODE	D1N20R
D651	8-719-063-70	DIODE	D1NL20U
D652	8-719-028-45	DIODE	D2L20U
D653	8-719-028-45	DIODE	D2L20U
D654	8-719-057-96	DIODE	D10SC6M-4012
D655	8-719-052-91	DIODE	D4SBS4-F
D656	8-719-028-45	DIODE	D2L20U
D657	8-719-028-45	DIODE	D2L20U
D658	8-719-063-70	DIODE	D1NL20U
D659	8-719-063-70	DIODE	D1NL20U
D660	8-719-028-45	DIODE	D2L20U
D661	8-719-991-33	DIODE	1SS133T-77
D662	8-719-991-33	DIODE	1SS133T-77
D663	8-719-991-33	DIODE	1SS133T-77
D664	8-719-981-94	DIODE	MTZJ-2.7A
D665	8-719-991-33	DIODE	1SS133T-77
D666	8-719-991-33	DIODE	1SS133T-77
D667	8-719-032-12	DIODE	D1NS6
D668	8-719-110-61	DIODE	RD24ESB1
D669	8-719-921-86	DIODE	MTZJ-13
D670	8-719-027-22	DIODE	D3S6M-F
D671	8-719-027-22	DIODE	D3S6M-F
D673	8-719-991-33	DIODE	1SS133T-77
D674	8-719-991-33	DIODE	1SS133T-77
D675	8-719-110-17	DIODE	RD10ESB2
D676	8-719-109-72	DIODE	RD3.9ESB2
D677	8-719-991-33	DIODE	1SS133T-77
D680	8-719-991-33	DIODE	1SS133T-77
D1501	8-719-109-89	DIODE	RD5.6ESB2
D1503	8-719-921-40	DIODE	MTZJ-4.7C

G

REF. NO.	PART NO.	DESCRIPTION	REMARK
D1504	8-719-110-08	DIODE RD8.2ESB2	
D1505	8-719-110-41	DIODE RD15ESB2	
D1506	8-719-110-41	DIODE RD15ESB2	
D1507	8-719-110-41	DIODE RD15ESB2	
D1509	8-719-110-41	DIODE RD15ESB2	
D1510	8-719-110-41	DIODE RD15ESB2	
D1513	8-719-110-41	DIODE RD15ESB2	
D1515	8-719-110-41	DIODE RD15ESB2	
D1520	8-719-109-93	DIODE RD6.2ESB2	
D1521	8-719-109-93	DIODE RD6.2ESB2	
D1522	8-719-924-16	DIODE MTZJ-T-77-24	
D1523	8-719-924-16	DIODE MTZJ-T-77-24	
D1525	8-719-908-03	DIODE GP08D	
		<FUSE>	
F601	⚠ 1-576-193-11	FUSE 6.3A/125V	
F651	⚠ 1-576-360-21	FUSE, MULTIPLE 4A	
F652	⚠ 1-576-360-21	FUSE, MULTIPLE 4A	
		<FERRITEBEAD>	
FB655	1-410-396-41	FERRITE 0.45UH	
FB656	1-410-396-41	FERRITE 0.45UH	
		<IC>	
IC502	8-759-133-90	IC É PC339C	
IC601	⚠ 8-729-045-39	TRANSISTOR MX0842AB-F	
IC651	8-759-103-93	IC É PC393C	
IC652	8-759-701-84	IC NJM7905FA	
IC653	8-759-701-75	IC NJM7805FA	
IC654	⚠ 8-749-012-13	IC DM-58	
IC655	8-759-450-47	IC BA05T	
IC1501	8-752-068-36	IC CXA1726AS	
IC1502	8-749-014-37	IC STK392-150	
IC1504	8-759-634-51	IC M5218AP	
IC1505	8-759-634-51	IC M5218AP	
IC1506	8-749-014-37	IC STK392-150	
IC1507	8-759-634-51	IC M5218AP	
IC1509	8-759-593-33	IC LA78045	
		<COIL>	
L501	1-412-533-21	INDUCTOR 47UH	
L502	1-414-187-11	INDUCTOR 47UH	
L503	1-459-104-00	COIL, DUST CORE	
L504	⚠ 1-419-082-11	COIL, HORIZONTAL LINEARITY	
L505	1-412-552-11	INDUCTOR 2.2MMH	
L601	⚠ 1-433-900-11	TRANSFORMER, LINE FILTER	
L651	1-412-525-31	INDUCTOR 10UH	
L652	1-412-525-31	INDUCTOR 10UH	
L653	1-412-525-31	INDUCTOR 10UH	
L656	1-412-525-31	INDUCTOR 10UH	
L657	1-412-525-31	INDUCTOR 10UH	
L658	1-412-525-31	INDUCTOR 10UH	
L1501	1-412-533-21	INDUCTOR 47UH	
L1502	1-412-533-21	INDUCTOR 47UH	
L1509	1-412-533-21	INDUCTOR 47UH	
L1510	1-412-533-21	INDUCTOR 47UH	
L1511	1-412-533-21	INDUCTOR 47UH	
L1512	1-412-533-21	INDUCTOR 47UH	
L1513	1-412-525-31	INDUCTOR 10UH	
L1514	1-414-187-11	INDUCTOR 47UH	
L1515	1-414-187-11	INDUCTOR 47UH	
		<NEONLAMP>	
NL501	1-517-778-21	LAMP, NEON	
NL502	1-517-778-21	LAMP, NEON	
NL503	1-517-778-21	LAMP, NEON	
NL504	1-517-778-21	LAMP, NEON	
NL505	1-517-778-21	LAMP, NEON	
		<ICLINK>	
PS501	1-533-593-11	LINK, IC	
PS1501	1-533-593-11	LINK, IC	
PS1502	1-533-593-11	LINK, IC	
PS1503	1-533-593-11	LINK, IC	
PS1504	1-533-593-11	LINK, IC	
PS1505	1-533-593-11	LINK, IC	
PS1506	1-533-593-11	LINK, IC	
		<TRANSISTOR>	
Q501	8-729-048-47	TRANSISTOR 2SC2688(5)-LK	
Q502	8-729-048-46	TRANSISTOR 2SD2578-RF	
Q503	8-729-931-45	TRANSISTOR IRF614	
Q505	8-729-032-61	TRANSISTOR 2SC5022-02	
Q506	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q507	8-729-032-61	TRANSISTOR 2SC5022-02	
Q601	8-729-046-40	TRANSISTOR 2SK2663	
Q602	8-729-922-39	TRANSISTOR 2SD2144S-V	
Q651	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q652	8-729-922-37	TRANSISTOR 2SD2144S-UVW	
Q653	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q654	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q655	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q656	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q657	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q658	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q1501	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1502	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q1503	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1505	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1506	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1508	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1509	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q1511	8-729-119-78	TRANSISTOR 2SC2785-HFE	
		<RESISTOR>	
R501	1-247-843-11	CARBON 3.3K 5% 1/4W	
R502	1-249-419-11	CARBON 1.5K 5% 1/4W	

G

• The components identified by ⋈ in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

REF. NO.		PART NO.	DESCRIPTION			REMARK
R503		1-260-336-11	CARBON	4.7K	5%	1/2W
R504		1-260-087-11	CARBON	100	5%	1/2W
R505		1-260-087-11	CARBON	100	5%	1/2W
R506		1-216-481-11	METAL OXIDE	1.2K	5%	3W F
R507		1-216-481-11	METAL OXIDE	1.2K	5%	3W F
R508		1-216-481-11	METAL OXIDE	1.2K	5%	3W F
R509		1-260-337-11	CARBON	5.6K	5%	1/2W
R510		1-249-421-11	CARBON	2.2K	5%	1/4W
R511		1-215-879-11	METAL OXIDE	47K	5%	1W F
R512		1-249-422-11	CARBON	2.7K	5%	1/4W
R513		1-249-422-11	CARBON	2.7K	5%	1/4W
R514		1-249-422-11	CARBON	2.7K	5%	1/4W
R515		1-260-131-11	CARBON	470K	5%	1/2W
R517		1-247-895-91	CARBON	470K	5%	1/4W
R519		1-215-445-00	METAL	10K	1%	1/4W
R522		1-215-399-00	METAL	120	1%	1/4W
R523		1-247-895-91	CARBON	470K	5%	1/4W
R524		1-247-863-91	CARBON	22K	5%	1/4W
R525		1-249-428-11	CARBON	8.2K	5%	1/4W
R526		1-249-437-11	CARBON	47K	5%	1/4W
R527		1-249-428-11	CARBON	8.2K	5%	1/4W
R528		1-249-437-11	CARBON	47K	5%	1/4W
R529		1-247-895-91	CARBON	470K	5%	1/4W
R530		1-249-428-11	CARBON	8.2K	5%	1/4W
R531		1-249-429-11	CARBON	10K	5%	1/4W
R532		1-249-430-11	CARBON	12K	5%	1/4W
R535		1-247-887-00	CARBON	220K	5%	1/4W
⋈R536	⚠		METAL			1/4W
R537		1-247-863-91	CARBON	22K	5%	1/4W
R538		1-215-443-00	METAL	8.2K	1%	1/4W
R542		1-249-424-11	CARBON	3.9K	5%	1/4W
R543		1-260-135-11	CARBON	1M	5%	1/2W
R544		1-249-405-11	CARBON	100	5%	1/4W F
⋈R545			METAL			1/4W
R546		1-215-456-00	METAL	30K	1%	1/4W
R548		1-215-449-00	METAL	15K	1%	1/4W
R550		1-215-910-00	METAL OXIDE	68	5%	3W F
R551		1-215-910-00	METAL OXIDE	68	5%	3W F
R556		1-249-437-11	CARBON	47K	5%	1/4W
R563		1-247-887-00	CARBON	220K	5%	1/4W
R566		1-215-868-00	METAL OXIDE	680	5%	1W F
R567		1-249-437-11	CARBON	47K	5%	1/4W
R568		1-249-405-11	CARBON	100	5%	1/4W F
R569		1-260-314-11	CARBON	68	5%	1/2W
R570		1-247-807-31	CARBON	100	5%	1/4W
R571		1-215-917-11	METAL OXIDE	1K	5%	3W F
R572		1-216-490-11	METAL OXIDE	39K	5%	3W F
R573		1-214-912-00	METAL	91K	1%	1/2W
R574		1-216-490-11	METAL OXIDE	39K	5%	3W F
R575		1-247-863-91	CARBON	22K	5%	1/4W
R576		1-247-881-00	CARBON	120K	5%	1/4W
R577		1-214-923-00	METAL	270K	1%	1/2W
R578		1-216-490-11	METAL OXIDE	39K	5%	3W F
R579		1-216-490-11	METAL OXIDE	39K	5%	3W F
R580		1-249-413-11	CARBON	470	5%	1/4W
R581		1-247-807-31	CARBON	100	5%	1/4W
R582		1-260-292-11	CARBON	1	5%	1/2W
R583		1-260-117-11	CARBON	33K	5%	1/2W
R584		1-249-377-11	CARBON	0.47	5%	1/4W F
R586		1-215-862-11	METAL OXIDE	68	5%	1W F (48/61V80)
R586		1-215-864-00	METAL OXIDE	150	5%	1W F (53V80)
R587		1-216-349-00	METAL OXIDE	1	5%	1W F
R588		1-215-862-11	METAL OXIDE	68	5%	1W F (48/61V80)
R588		1-215-864-00	METAL OXIDE	150	5%	1W F (53V80)
R589		1-247-807-31	CARBON	100	5%	1/4W
R590		1-260-127-11	CARBON	220K	5%	1/2W
R591		1-216-392-11	METAL OXIDE	1.8	5%	3W F
R592		1-247-863-91	CARBON	22K	5%	1/4W
R593		1-249-429-11	CARBON	10K	5%	1/4W
R594		1-249-377-11	CARBON	0.47	5%	1/4W F
R595		1-249-377-11	CARBON	0.47	5%	1/4W F
R596		1-249-377-11	CARBON	0.47	5%	1/4W F
R597		1-260-288-11	CARBON	0.47	5%	1/2W
R598		1-249-377-11	CARBON	0.47	5%	1/4W F
R599		1-249-429-11	CARBON	10K	5%	1/4W
R600		1-247-863-91	CARBON	22K	5%	1/4W
R601	⚠	1-219-776-11	CARBON	2.2M	10%	1/2W
R602	⚠	1-219-759-11	CARBON	1M	5%	1/2W
R603	⚠	1-240-881-11	CMT,MELF	0.82	5%	20W
R604		1-260-298-51	CARBON	3.3	5%	1/2W
R605		1-249-415-11	CARBON	680	5%	1/4W
R606	⚠	1-240-881-11	CMT,MELF	0.82	5%	20W
R607		1-249-389-11	CARBON	4.7	5%	1/4W F
R608		1-247-791-91	CARBON	22	5%	1/4W
R609		1-240-205-91	CARBON	22M	5%	1/2W
R610		1-260-127-11	CARBON	220K	5%	1/2W
R611		1-260-127-11	CARBON	220K	5%	1/2W
R612	⚠	1-202-933-61	FUSIBLE	0.1	10%	1/2W F
R613		1-249-413-11	CARBON	470	5%	1/4W
R615		1-249-437-11	CARBON	47K	5%	1/4W
R616		1-249-421-11	CARBON	2.2K	5%	1/4W
R617		1-216-349-00	METAL OXIDE	1	5%	1W F
R618		1-260-127-11	CARBON	220K	5%	1/2W
R619		1-216-349-00	METAL OXIDE	1	5%	1W F
R620		1-215-493-00	METAL	1M	1%	1/4W
R621		1-260-127-11	CARBON	220K	5%	1/2W
R622		1-249-441-11	CARBON	100K	5%	1/4W
R623		1-260-127-11	CARBON	220K	5%	1/2W
R624		1-260-127-11	CARBON	220K	5%	1/2W
R651		1-249-387-11	CARBON	3.3	5%	1/4W
R652		1-249-377-11	CARBON	0.47	5%	1/4W F
R654		1-216-361-00	METAL OXIDE	0.22	5%	2W F
R655		1-260-288-11	CARBON	0.47	5%	1/2W
R656		1-249-377-11	CARBON	0.47	5%	1/4W F
R657		1-215-421-00	METAL	1K	1%	1/4W
R658		1-249-429-11	CARBON	10K	5%	1/4W
R659		1-215-450-00	METAL	16K	1%	1/4W
R660		1-215-439-00	METAL	5.6K	1%	1/4W
R661		1-215-481-00	METAL	330K	1%	1/4W
R662		1-215-445-00	METAL	10K	1%	1/4W

G

REF. NO.	PART NO.	DESCRIPTION			REMARK
R663	1-215-445-00	METAL	10K	1%	1/4W
R664	1-249-425-11	CARBON	4.7K	5%	1/4W
R665	1-249-425-11	CARBON	4.7K	5%	1/4W
R666	1-247-887-00	CARBON	220K	5%	1/4W
R667	1-249-429-11	CARBON	10K	5%	1/4W
R668	1-249-429-11	CARBON	10K	5%	1/4W
R669	1-247-807-31	CARBON	100	5%	1/4W
R670	1-249-417-11	CARBON	1K	5%	1/4W
R671	1-249-429-11	CARBON	10K	5%	1/4W
R672	1-249-417-11	CARBON	1K	5%	1/4W F
R673	1-249-425-11	CARBON	4.7K	5%	1/4W
R675	1-249-429-11	CARBON	10K	5%	1/4W
R676	1-249-417-11	CARBON	1K	5%	1/4W
R677	1-249-417-11	CARBON	1K	5%	1/4W
R678	1-249-425-11	CARBON	4.7K	5%	1/4W
R679	1-247-807-31	CARBON	100	5%	1/4W
R680	1-249-429-11	CARBON	10K	5%	1/4W
R681	1-249-429-11	CARBON	10K	5%	1/4W
R682	1-249-417-11	CARBON	1K	5%	1/4W
R683	1-249-417-11	CARBON	1K	5%	1/4W
R684	1-249-425-11	CARBON	4.7K	5%	1/4W
R685	1-249-417-11	CARBON	1K	5%	1/4W
R686	1-215-445-00	METAL	10K	1%	1/4W
R687	1-215-429-00	METAL	2.2K	1%	1/4W
R688	1-215-429-00	METAL	2.2K	1%	1/4W
R689	1-249-417-11	CARBON	1K	5%	1/4W
R690	1-215-437-00	METAL	4.7K	1%	1/4W
R691	1-249-417-11	CARBON	1K	5%	1/4W
R1501	1-214-800-11	METAL	2.2	1%	1/2W
R1502	1-214-800-11	METAL	2.2	1%	1/2W
R1503	1-215-421-00	METAL	1K	1%	1/4W
R1504	1-215-433-00	METAL	3.3K	1%	1/4W
R1505	1-247-815-91	CARBON	220	5%	1/4W
R1506	1-247-815-91	CARBON	220	5%	1/4W
R1507	1-215-433-00	METAL	3.3K	1%	1/4W
R1508	1-215-421-00	METAL	1K	1%	1/4W
R1509	1-214-800-11	METAL	2.2	1%	1/2W
R1510	1-214-800-11	METAL	2.2	1%	1/2W
R1511	1-214-800-11	METAL	2.2	1%	1/2W
R1512	1-214-800-11	METAL	2.2	1%	1/2W
R1513	1-215-421-00	METAL	1K	1%	1/4W
R1514	1-215-433-00	METAL	3.3K	1%	1/4W
R1515	1-247-815-91	CARBON	220	5%	1/4W
R1516	1-249-429-11	CARBON	10K	5%	1/4W
R1517	1-247-887-00	CARBON	220K	5%	1/4W
R1518	1-249-429-11	CARBON	10K	5%	1/4W
R1519	1-249-437-11	CARBON	47K	5%	1/4W
R1522	1-214-800-11	METAL	2.2	1%	1/2W
R1523	1-214-800-11	METAL	2.2	1%	1/2W
R1524	1-215-421-00	METAL	1K	1%	1/4W
R1525	1-215-433-00	METAL	3.3K	1%	1/4W
R1526	1-247-815-91	CARBON	220	5%	1/4W
R1527	1-247-815-91	CARBON	220	5%	1/4W
R1528	1-215-433-00	METAL	3.3K	1%	1/4W
R1529	1-215-421-00	METAL	1K	1%	1/4W
R1530	1-214-800-11	METAL	2.2	1%	1/2W
R1531	1-214-800-11	METAL	2.2	1%	1/2W
R1532	1-214-800-11	METAL	2.2	1%	1/2W
R1534	1-214-800-11	METAL	2.2	1%	1/2W
R1535	1-215-421-00	METAL	1K	1%	1/4W
R1536	1-215-433-00	METAL	3.3K	1%	1/4W
R1537	1-247-815-91	CARBON	220	5%	1/4W
R1538	1-249-429-11	CARBON	10K	5%	1/4W
R1539	1-249-428-11	CARBON	8.2K	5%	1/4W
R1540	1-249-417-11	CARBON	1K	5%	1/4W
R1541	1-247-843-11	CARBON	3.3K	5%	1/4W
R1542	1-249-429-11	CARBON	10K	5%	1/4W
R1543	1-249-429-11	CARBON	10K	5%	1/4W
R1544	1-249-419-11	CARBON	1.5K	5%	1/4W
R1548	1-249-438-11	CARBON	56K	5%	1/4W
R1549	1-214-800-11	METAL	2.2	1%	1/2W
R1550	1-215-437-00	METAL	4.7K	1%	1/4W
R1551	1-249-428-11	CARBON	8.2K	5%	1/4W
R1552	1-214-800-11	METAL	2.2	1%	1/2W
R1554	1-215-440-00	METAL	6.2K	1%	1/4W
R1555	1-247-807-31	CARBON	100	5%	1/4W
R1556	1-247-863-91	CARBON	22K	5%	1/4W
R1557	1-249-429-11	CARBON	10K	5%	1/4W
R1558	1-249-429-11	CARBON	10K	5%	1/4W
R1559	1-215-857-11	METAL OXIDE	10	5%	1W F
R1560	1-215-888-00	METAL OXIDE	220	5%	2W F
R1561	1-249-429-11	CARBON	10K	5%	1/4W
R1562	1-249-429-11	CARBON	10K	5%	1/4W
R1563	1-249-429-11	CARBON	10K	5%	1/4W
R1564	1-215-445-00	METAL	10K	1%	1/4W
R1565	1-249-429-11	CARBON	10K	5%	1/4W
R1566	1-249-427-11	CARBON	6.8K	5%	1/4W
R1567	1-247-863-91	CARBON	22K	5%	1/4W
R1568	1-249-429-11	CARBON	10K	5%	1/4W
R1570	1-249-383-11	CARBON	1.5	5%	1/4W F
R1576	1-249-429-11	CARBON	10K	5%	1/4W
R1577	1-215-437-00	METAL	4.7K	1%	1/4W
R1582	1-249-421-11	CARBON	2.2K	5%	1/4W
R1583	1-247-807-31	CARBON	100	5%	1/4W
R1584	1-247-863-91	CARBON	22K	5%	1/4W
R1585	1-215-440-00	METAL	6.2K	1%	1/4W
R1587	1-249-414-11	CARBON	560	5%	1/4W
R1588	1-249-414-11	CARBON	560	5%	1/4W
R1589	1-249-414-11	CARBON	560	5%	1/4W
R1590	1-249-414-11	CARBON	560	5%	1/4W
R1591	1-249-414-11	CARBON	560	5%	1/4W
R1592	1-249-414-11	CARBON	560	5%	1/4W
R1593	1-216-475-11	METAL OXIDE	120	5%	3W F
R1594	1-216-475-11	METAL OXIDE	120	5%	3W F
R1595	1-216-475-11	METAL OXIDE	120	5%	3W F
R1596	1-216-475-11	METAL OXIDE	120	5%	3W F
R1597	1-216-475-11	METAL OXIDE	120	5%	3W F
R1598	1-216-475-11	METAL OXIDE	120	5%	3W F
R1599	1-249-429-11	CARBON	10K	5%	1/4W
R1600	1-247-807-31	CARBON	100	5%	1/4W
R1601	1-249-437-11	CARBON	47K	5%	1/4W
R1602	1-247-807-31	CARBON	100	5%	1/4W
R1603	1-249-418-11	CARBON	1.2K	5%	1/4W

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

REF. NO.		PART NO.	DESCRIPTION			REMARK
R1604		1-249-429-11	CARBON	10K	5%	1/4W
R1610		1-247-807-31	CARBON	100	5%	1/4W
R1611		1-247-807-31	CARBON	100	5%	1/4W
R1612		1-249-429-11	CARBON	10K	5%	1/4W
R1613		1-249-429-11	CARBON	10K	5%	1/4W
			<RELAY>			
RY601	⚠	1-755-266-11	RELAY, AC POWER			
			<TRANSFORMER>			
T501	⚠	1-433-836-11	TRANSFORMER, HORIZONTAL DRIVE			
T502	⚠	1-433-876-11	TRANSFORMER, FERRITE (PMT)			
T504	⚠	X-4560-164-1	FBT ASSY, NX-4007			
T601	⚠	1-433-871-11	TRANSFORMER, CONVERTER (PIT)			
T602	⚠	1-433-844-11	TRANSFORMER, CONVERTER			
T603	⚠	1-429-992-21	TRANSFORMER, CONVERTER (PRT)			
			<THERMISTOR>			
TH1501		1-807-925-11	THERMISTOR			
			<TESTPIN>			
TP501	*	1-535-881-21	TERMINAL, TP (AUTO INSERTION)			
			<VARISTOR>			
VDR601	⚠	1-801-073-31	VARISTOR TNR14V471K660			
**********						
	*	A-1331-922-A	CR BOARD, COMPLETE			
			**********			
		4-382-854-11	SCREW(M3X10), P, SW (+)			
			<CAPACITOR>			
C701		1-104-570-11	CERAMIC	0.001MF	10%	2KV
C703		1-104-664-11	ELECT	47MF	20%	25V
C706		1-102-114-00	CERAMIC	470PF	10%	50V
C708		1-102-113-00	CERAMIC	390PF	10%	50V
C709		1-101-880-00	CERAMIC	47PF	5%	50V
C710		1-162-115-00	CERAMIC	330PF	10%	2KV
C711		1-161-830-00	CERAMIC	0.0047MF		500V
C712		1-107-662-11	ELECT	22MF	20%	250V
			<CONNECTOR>			
CN701	*	1-564-507-11	PLUG, CONNECTOR 4P			
CN702	*	1-564-512-11	PLUG, CONNECTOR 9P			
CN703		1-785-879-11	CONNECTOR, ONE TOUCH			
CN704	⚠	1-251-182-11	SOCKET, CRT			
CN705		1-695-915-11	TAB (CONTACT)			
CN706		1-695-915-11	TAB (CONTACT)			
			<DIODE>			
D705		8-719-991-33	DIODE 1SS133T-77			
D706		8-719-991-33	DIODE 1SS133T-77			
D707		8-719-991-33	DIODE 1SS133T-77			
D708		8-719-991-33	DIODE 1SS133T-77			
D709		8-719-991-33	DIODE 1SS133T-77			
			<COIL>			
L701		1-414-188-41	INDUCTOR	68UH		
L702		1-414-223-11	INDUCTOR	470UH		
			<NEONLAMP>			
NL701		1-517-778-21	LAMP, NEON			
			<TRANSISTOR>			
Q704		8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q705		8-729-326-11	TRANSISTOR 2SC2611			
Q706		8-729-200-17	TRANSISTOR 2SA1091-O			
			<RESISTOR>			
R701		1-219-743-11	CARBON	100	5%	1/2W
R702		1-260-132-11	CARBON	560K	5%	1/2W
R703		1-216-486-00	METAL OXIDE	8.2K	5%	3W F
R704		1-215-476-00	METAL	200K	1%	1/4W
R711		1-247-807-31	CARBON	100	5%	1/4W
R712		1-249-404-00	CARBON	82	5%	1/4W
R713		1-216-486-00	METAL OXIDE	8.2K	5%	3W F
R714		1-249-393-11	CARBON	10	5%	1/4W
R715		1-249-419-11	CARBON	1.5K	5%	1/4W
R718		1-260-133-11	CARBON	680K	5%	1/2W
R719		1-249-425-11	CARBON	4.7K	5%	1/4W
R720		1-260-099-11	CARBON	1K	5%	1/2W
R721		1-260-099-11	CARBON	1K	5%	1/2W
R722		1-260-087-11	CARBON	100	5%	1/2W
			<SPARKGAP>			
SG701		1-519-422-11	GAP, SPARK			
SG702		1-519-422-11	GAP, SPARK			
			<TESTPIN>			
TP701	*	1-535-881-21	TERMINAL, TP (AUTO INSERTION)			
**********						

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

CG

REF. NO.		PART NO.	DESCRIPTION			REMARK
	*	A-1331-923-A	CG BOARD, COMPLETE			
			**********			
		4-382-854-11	SCREW(M3X10), P, SW (+)			
			<CAPACITOR>			
C731		1-104-664-11	ELECT	47MF	20% 25V	
C732		1-104-570-11	CERAMIC	0.001MF	10% 2KV	
C733		1-102-114-00	CERAMIC	470PF	10% 50V	
C734		1-102-114-00	CERAMIC	470PF	10% 50V	
C735		1-101-880-00	CERAMIC	47PF	5% 50V	
C736		1-161-830-00	CERAMIC	0.0047MF	500V	
C737		1-162-115-00	CERAMIC	330PF	10% 2KV	
C738		1-107-662-11	ELECT	22MF	20% 250V	
C1301		1-106-343-00	MYLAR	0.001MF	10% 200V	
C1302		1-107-639-11	ELECT	47MF	20% 160V	
C1303		1-126-933-11	ELECT	100MF	20% 16V	
C1305		1-126-933-11	ELECT	100MF	20% 16V	
C1308		1-106-383-00	MYLAR	0.047MF	10% 200V	
C1309		1-106-383-00	MYLAR	0.047MF	10% 200V	
C1310		1-126-960-11	ELECT	1MF	20% 50V	
C1312		1-161-830-00	CERAMIC	0.0047MF	500V	
C1313		1-102-129-00	CERAMIC	0.01MF	10% 50V	
C1314		1-102-129-00	CERAMIC	0.01MF	10% 50V	
C1315		1-126-933-11	ELECT	100MF	20% 16V	
			<CONNECTOR>			
CN731	*	1-564-512-11	PLUG, CONNECTOR 9P			
CN732	*	1-564-507-11	PLUG, CONNECTOR 4P			
CN733	*	1-564-508-11	PLUG, CONNECTOR 5P			
CN734	*	1-564-513-11	PLUG, CONNECTOR 10P			
CN735	*	1-564-512-11	PLUG, CONNECTOR 9P			
CN736	*	1-564-512-11	PLUG, CONNECTOR 9P			
CN737		1-785-879-11	CONNECTOR, ONE TOUCH			
CN738		1-695-915-11	TAB (CONTACT)			
CN739		1-695-915-11	TAB (CONTACT)			
CN740	⚠	1-251-182-11	SOCKET, CRT			
CN1301	*	1-564-506-11	PLUG, CONNECTOR 3P			
CN1302	*	1-564-506-11	PLUG, CONNECTOR 3P			
CN1303	*	1-564-506-11	PLUG, CONNECTOR 3P			
CN1304	*	1-564-509-11	PLUG, CONNECTOR 6P			
			<DIODE>			
D731		8-719-991-33	DIODE 1SS133T-77			
D732		8-719-991-33	DIODE 1SS133T-77			
D733		8-719-991-33	DIODE 1SS133T-77			
D734		8-719-991-33	DIODE 1SS133T-77			
D735		8-719-991-33	DIODE 1SS133T-77			
D736		8-719-109-84	DIODE RD5.1ESB1			
D1304		8-719-991-33	DIODE 1SS133T-77			
			<COIL>			
L731		1-414-188-41	INDUCTOR	68UH		
L732		1-414-223-11	INDUCTOR	470UH		
L1301		1-414-187-11	INDUCTOR	47UH		
L1302		1-414-187-11	INDUCTOR	47UH		
			<NEONLAMP>			
NL731		1-517-778-21	LAMP, NEON			
			<TRANSISTOR>			
Q731		8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q732		8-729-326-11	TRANSISTOR 2SC2611			
Q733		8-729-200-17	TRANSISTOR 2SA1091-O			
Q734		8-729-119-76	TRANSISTOR 2SA1175-HFE			
Q1301		8-729-017-06	TRANSISTOR 2SC4793			
Q1302		8-729-017-05	TRANSISTOR 2SA1837			
Q1303		8-729-119-76	TRANSISTOR 2SA1175-HFE			
Q1304		8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q1305		8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q1306		8-729-119-78	TRANSISTOR 2SC2785-HFE			
			<RESISTOR>			
R731		1-219-743-11	CARBON	100	5% 1/2W	
R732		1-260-132-11	CARBON	560K	5% 1/2W	
R733		1-247-807-31	CARBON	100	5% 1/4W	
R734		1-260-087-11	CARBON	100	5% 1/2W	
R735		1-249-403-11	CARBON	68	5% 1/4W	
R736		1-216-486-00	METAL OXIDE	8.2K	5% 3W	F
R737		1-249-393-11	CARBON	10	5% 1/4W	
R738		1-249-414-11	CARBON	560	5% 1/4W	
R739		1-216-486-00	METAL OXIDE	8.2K	5% 3W	F
R741		1-249-425-11	CARBON	4.7K	5% 1/4W	
R742		1-260-099-11	CARBON	1K	5% 1/2W	
R743		1-215-466-00	METAL	75K	1% 1/4W	
R744		1-260-133-11	CARBON	680K	5% 1/2W	
R745		1-260-099-11	CARBON	1K	5% 1/2W	
R746		1-249-437-11	CARBON	47K	5% 1/4W	
R747		1-249-438-11	CARBON	56K	5% 1/4W	
R1301		1-215-916-00	METAL OXIDE	680	5% 3W	F
R1302		1-215-916-00	METAL OXIDE	680	5% 3W	F
R1303		1-249-400-11	CARBON	39	5% 1/4W	F
R1304		1-249-391-11	CARBON	6.8	5% 1/4W	F
R1305		1-249-391-11	CARBON	6.8	5% 1/4W	F
R1306		1-249-429-11	CARBON	10K	5% 1/4W	
R1307		1-260-311-11	CARBON	39	5% 1/2W	
R1308		1-249-419-11	CARBON	1.5K	5% 1/4W	
R1310		1-249-441-11	CARBON	100K	5% 1/4W	
R1311		1-249-419-11	CARBON	1.5K	5% 1/4W	F
R1314		1-249-419-11	CARBON	1.5K	5% 1/4W	
R1315		1-249-399-11	CARBON	33	5% 1/4W	
R1319		1-249-413-11	CARBON	470	5% 1/4W	
R1321		1-249-406-11	CARBON	120	5% 1/4W	
R1323		1-249-377-11	CARBON	0.47	5% 1/4W	F
R1324		1-249-421-11	CARBON	2.2K	5% 1/4W	
R1325		1-249-427-11	CARBON	6.8K	5% 1/4W	
R1327		1-249-441-11	CARBON	100K	5% 1/4W	
R1328		1-249-435-11	CARBON	33K	5% 1/4W	

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

CG **CB** **HC**

REF. NO.	PART NO.	DESCRIPTION			REMARK
		<SPARKGAP>			
SG731	1-519-422-11	GAP, SPARK			
SG732	1-519-422-11	GAP, SPARK			
		<TESTPIN>			
TP731 *	1-535-881-21	TERMINAL, TP (AUTO INSERTION)			
TP732 *	1-535-881-21	TERMINAL, TP (AUTO INSERTION)			
TP733 *	1-535-881-21	TERMINAL, TP (AUTO INSERTION)			
**********					
*	A-1331-924-A	CB BOARD, COMPLETE			
		**********			
	4-382-854-11	SCREW(M3X10), P, SW (+)			
		<CAPACITOR>			
C761	1-104-664-11	ELECT	47MF	20%	25V
C762	1-104-570-11	CERAMIC	0.001MF	10%	2KV
C763	1-102-114-00	CERAMIC	470PF	10%	50V
C764	1-102-112-00	CERAMIC	330PF	10%	50V
C765	1-101-880-00	CERAMIC	47PF	5%	50V
C767	1-162-115-00	CERAMIC	330PF	10%	2KV
C768	1-126-964-11	ELECT	10MF	20%	50V
C769	1-161-830-00	CERAMIC	0.0047MF	500V	
C770	1-107-662-11	ELECT	22MF	20%	250V
		<CONNECTOR>			
CN761 *	1-564-508-11	PLUG, CONNECTOR 5P			
CN762 *	1-564-512-11	PLUG, CONNECTOR 9P			
CN763	1-785-879-11	CONNECTOR, ONE TOUCH			
CN764	1-695-915-11	TAB (CONTACT)			
CN765	1-695-915-11	TAB (CONTACT)			
CN766 ⚠	1-251-182-11	SOCKET, CRT			
		<DIODE>			
D761	8-719-991-33	DIODE 1SS133T-77			
D762	8-719-991-33	DIODE 1SS133T-77			
D763	8-719-991-33	DIODE 1SS133T-77			
D764	8-719-991-33	DIODE 1SS133T-77			
D765	8-719-991-33	DIODE 1SS133T-77			
		<COIL>			
L761	1-414-188-41	INDUCTOR	68UH		
L762	1-414-223-11	INDUCTOR	470UH		
		<NEONLAMP>			
NL761	1-517-778-21	LAMP, NEON			

REF. NO.	PART NO.	DESCRIPTION			REMARK
		<TRANSISTOR>			
Q761	8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q762	8-729-326-11	TRANSISTOR 2SC2611			
Q763	8-729-119-76	TRANSISTOR 2SA1175-HFE			
Q764	8-729-200-17	TRANSISTOR 2SA1091-O			
		<RESISTOR>			
R761	1-219-743-11	CARBON	100	5%	1/2W
R762	1-260-132-11	CARBON	560K	5%	1/2W
R763	1-247-807-31	CARBON	100	5%	1/4W
R764	1-216-486-00	METAL OXIDE	8.2K	5%	3W F
R765	1-247-807-31	CARBON	100	5%	1/4W
R766	1-216-486-00	METAL OXIDE	8.2K	5%	3W F
R767	1-249-393-11	CARBON	10	5%	1/4W
R768	1-249-418-11	CARBON	1.2K	5%	1/4W
R770	1-249-404-00	CARBON	82	5%	1/4W
R771	1-249-426-11	CARBON	5.6K	5%	1/4W
R772	1-249-435-11	CARBON	33K	5%	1/4W
R773	1-260-099-11	CARBON	1K	5%	1/2W
R775	1-249-425-11	CARBON	4.7K	5%	1/4W
R776	1-260-133-11	CARBON	680K	5%	1/2W
R777	1-260-099-11	CARBON	1K	5%	1/2W
R779	1-260-087-11	CARBON	100	5%	1/2W
		<SPARKGAP>			
SG761	1-519-422-11	GAP, SPARK			
SG762	1-519-422-11	GAP, SPARK			
		<TESTPIN>			
TP761 *	1-535-881-21	TERMINAL, TP (AUTO INSERTION)			
**********					
*	A-1372-618-A	HC BOARD, COMPLETE			
		**********			
		<CAPACITOR>			
C1291	1-126-791-11	ELECT	10MF	20%	16V
		<CONNECTOR>			
CN1291 *	1-564-518-11	PLUG, CONNECTOR 3P			
		<DIODE>			
D1291	8-719-066-43	DIODE GP1U28Y			
D1292	8-719-109-89	DIODE RD5.6ESB2			
D1293	8-719-109-89	DIODE RD5.6ESB2			

HC HA HB S

REF. NO.	PART NO.	DESCRIPTION			REMARK
		<RESISTOR>			
R1291	1-247-807-31	CARBON	100	5% 1/4W	

****

* A-1372-619-A HA BOARD, COMPLETE
****

		<CONNECTOR>			
CN1202 *	1-564-517-11	PLUG, CONNECTOR 2P			
CN1203 *	1-564-522-11	PLUG, CONNECTOR 7P			
		<DIODE>			
D1201	8-719-053-43	DIODE SLR-325VCT31 (TIMER/STANDBY)			
		<RESISTOR>			
R1201	1-249-431-11	CARBON	15K	5% 1/4W	
R1202	1-249-425-11	CARBON	4.7K	5% 1/4W	
R1203	1-249-417-11	CARBON	1K	5% 1/4W	
R1204	1-249-419-11	CARBON	1.5K	5% 1/4W	
R1205	1-249-421-11	CARBON	2.2K	5% 1/4W	
R1206	1-247-815-91	CARBON	220	5% 1/4W	
		<SWITCH>			
S1201	1-572-198-11	SWITCH, KEY BOARD (FLASH FOCUS)			
S1202	1-572-198-11	SWITCH, KEY BOARD (TV/VIDEO)			
S1203	1-572-198-11	SWITCH, KEY BOARD (VOLUME -)			
S1204	1-572-198-11	SWITCH, KEY BOARD (VOLUME +)			
S1205	1-572-198-11	SWITCH, KEY BOARD (CHANNEL -)			
S1206	1-572-198-11	SWITCH, KEY BOARD (CHANNEL +)			
S1207	1-572-198-11	SWITCH, KEY BOARD (POWER)			

****

* A-1372-620-A HB BOARD, COMPLETE
****

		<CAPACITOR>			
C1251	1-128-551-11	ELECT	22MF	20% 25V	
C1252	1-128-551-11	ELECT	22MF	20% 25V	
C1253	1-128-551-11	ELECT	22MF	20% 25V	
C1254	1-128-551-11	ELECT	22MF	20% 25V	
C1255	1-128-551-11	ELECT	22MF	20% 25V	
		<CONNECTOR>			
CN1252 *	1-564-517-11	PLUG, CONNECTOR 2P			
CN1253 *	1-564-526-11	PLUG, CONNECTOR 11P			
		<DIODE>			
D1251	8-719-110-17	DIODE RD10ESB2			
D1252	8-719-110-17	DIODE RD10ESB2			
D1253	8-719-110-17	DIODE RD10ESB2			
D1254	8-719-110-17	DIODE RD10ESB2			
D1255	8-719-110-17	DIODE RD10ESB2			
D1256	8-719-110-17	DIODE RD10ESB2			
		<JACK>			
J1251	1-770-361-11	TERMINAL BLOCK, S (VIDEO 2 IN)			
		<RESISTOR>			
R1251	1-249-429-11	CARBON	10K	5% 1/4W	
R1252	1-249-424-11	CARBON	3.9K	5% 1/4W	
R1253	1-249-421-11	CARBON	2.2K	5% 1/4W	
R1254	1-249-418-11	CARBON	1.2K	5% 1/4W	
R1255	1-249-425-11	CARBON	4.7K	5% 1/4W	
R1256	1-247-804-11	CARBON	75	5% 1/4W	
R1257	1-247-895-91	CARBON	470K	5% 1/4W	
R1258	1-247-895-91	CARBON	470K	5% 1/4W	
R1259	1-247-804-11	CARBON	75	5% 1/4W	
R1260	1-247-804-11	CARBON	75	5% 1/4W	
		<SWITCH>			
S1251	1-572-198-11	SWITCH, KEY BOARD (SELECT)			
S1252	1-572-198-11	SWITCH, KEY BOARD (+)			
S1253	1-572-198-11	SWITCH, KEY BOARD (-)			
S1254	1-572-198-11	SWITCH, KEY BOARD (MENU)			
S1255	1-572-198-11	SWITCH, KEY BOARD (SET UP)			

****

* A-1390-933-A S BOARD, COMPLETE
****

		<CONNECTOR>			
CN3001 *	1-564-506-11	PLUG, CONNECTOR 3P			
		<DIODE>			
D3001	8-719-109-89	DIODE RD5.6ESB2			
		<SWITCH>			
S3001	1-528-911-21	BATTERY, SOLAR			

****

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION	REMARK
		MISCELLANEOUS	
		**********	
⚠	1-223-925-11	RESISTOR ASSY (FOCUS PACK)	
⚠	1-451-469-21	COIL ASSY, VM (53/61V80)	
⚠	1-451-496-11	DEFLECTION YOKE (48V80)	
⚠	1-451-497-21	DEFLECTION YOKE (53/61V80)	
⚠	1-452-790-21	NECK ASSY (48V80)	
⚠	1-452-909-31	MAGNET ASSY, 4 POLE (48V80)	
	1-529-401-11	SPEAKER (13cm) (48/53V80)	
	1-529-402-11	SPEAKER (16cm) (61V80)	
	1-529-403-21	SPEAKER (6.6cm)	
	1-556-945-21	CABLE, P-P	
*	1-557-056-31	CABLE, P-P	
⚠	1-790-130-11	CORD, AC POWER(WITH CONNECTOR)	
⚠	8-598-955-30	BLOCK ASSY, HIGH-VOLTAGE	
⚠	8-733-570-05	CRT 07MXC2(G) (48V80)	
⚠	8-733-572-05	CRT 07MXC3(R) (48V80)	
⚠	8-733-575-05	CRT 07MAC3(B) (48V80)	
⚠	A-1501-277-A	CRT COUPLER (B) ASSY (53V80)	
⚠	A-1501-278-A	CRT COUPLER (R) ASSY (53V80)	
⚠	A-1501-279-A	CRT COUPLER (G) ASSY (53V80)	
⚠	A-1501-520-A	CRT COUPLER (B) ASSY (61V80)	
⚠	A-1501-521-A	CRT COUPLER (R) ASSY (61V80)	
⚠	A-1501-522-A	CRT COUPLER (G) ASSY (61V80)	
⚠	X-4560-164-1	FLAY BACK TRANS ASSY, NX4007//J1P4 (T504)	

****

ACCESSORIES AND PACKING MATERIALS
****

	3-866-564-11	MANUAL, INSTRUCTION	
	3-866-564-21	MANUAL, INSTRUCTION	
	3-866-564-31	MANUAL, INSTRUCTION	
	3-866-564-41	MANUAL, INSTRUCTION	
*	4-041-426-01	BAG, PROTECTION (53/61V80)	
*	4-042-463-01	SHEET, PROTECTION (53/61V80)	
*	4-069-573-01	INDIVIDUAL CARTON (53V80)	
*	4-069-574-01	BOARD, BOTTOM(53V80)	
*	4-069-575-01	TRAY (53V80)	
*	4-069-576-01	CUSHION (UPPER) (ASSY) (53V80)	
*	4-069-577-01	CUSHION (LOWER) (ASSY) (53V80)	
*	4-069-582-01	INDIVIDUAL CARTON (61V80)	
*	4-069-583-01	BOARD, BOTTOM(61V80)	
*	4-069-584-01	TRAY (61V80)	
*	4-069-585-01	CUSHION (UPPER) (ASSY) (61V80)	
*	4-069-586-01	CUSHION (LOWER) (ASSY) (61V80)	
	4-071-401-01	PARTITION (27-G-1) (53V80)	
	4-071-402-01	PARTITION (27-G-2) (53V80)	
	4-071-403-01	SHEET, C.F.B. (53V80)	
	4-071-404-01	CUSHION (53V80)	
	4-071-405-01	HOLDER (53V80)	
	4-071-406-01	TRAY (53V80)	
	4-071-407-01	BASE TRAY (53V80)	
	4-071-421-01	CARTON, SUB (53V80)	
	X-4036-896-1	PARTITION ASSY (53V80)	

REMOTE COMMANDER
****

1-418-468-11	REMOTE COMMANDER (RM-Y905)	
4-978-977-01	COVER, BATTERY (FOR RM-Y905)	

KP-48V80/53V80/61V80

RM-Y905 RM-Y905 RM-Y905

Sony Corporation
HDC. PJ Division Company

9-965-400-01

English
99FA74371-1
Printed in USA
©1999.6